



YMGI Group, POB 1559
YMGI Group New Energy, POB 1668
 O'Fallon, MO 63366, USA
 Tel:(866)833-3138 Fax:(866)377-3355
 Web Site: www.ymgigroup.com
 Email: info@ymgigroup.com

Literature Part No: LIT-WMMS-(59) (2)-EW-DC IVTR-USER MANUAL-20130813
 For WMMS Series of Product Single Zone (Cooling, Heat Pump)
 Subject to Continuous Engineering Improvement without Prior Notice.

YMGI is the Trademark and Property of YMGI Group. Copyright of YMGI Group.



YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World !

TECHNICIAN'S SERVICE MANUAL

DC INVERTER MULTIPLE ZONE (59) (2)

SYMPHONY CHOIR

INDOOR UNIT-WALL MOUNT (EW)



WMMS-09EW-V2B(59) (2)
 WMMS-12EW-V2B(59) (2)
 WMMS-18EW-V2B(59) (2)



⚠ WARNING

This product is designed and manufactured free from defects in material and workmanship under the normal use and maintenance. Installation, operation, maintenance and service shall follow professional practices for regular cooling and heating equipment, NEC, State, City or Local Codes and related manuals from us. Otherwise, damage to equipment or property even injury to people may occur.

Installer: Currently licensed HVAC installer only, Read this manual before installation. Sign on the warranty registration card.

User: Keep this manual for future maintenance and service use.

Service: Use this manual for service reference.



LITERATURE: LIT-WMMS-(59) (2)-EW-DC IVTR-USER MANUAL-20130813

CONTENTS

KIND REMINDING & WARNING-READ MANUAL(S) BEFORE INSTALLING UNITS ----- 2

LIMITED PRODUCT WARRANTY POLICIES ----- 3

LIMITED PRODUCT WARRANTY REGISTRATION CARD ----- 4

CUSTOMER AND TECHNICIAN MUST READ ----- 5

IMPORTANT NOTES ----- 12

PART NAME ----- 13

TECHNICAL SPECIFICATIONS ----- 14

UNIT VIEWS,DIMENSIONS & MOUNING BRACKET CLEARANCE ----- 15

WIRING DIAGRAM ----- 17

REMOTE CONTROL & UNIT FUNCTIONS ----- 18

SYSTEM LAYOUT & INSTALLATION CLEARANCE ----- 21

INSTALLATION LOCATIONS & CAUTIONS ----- 25

HEIGHT LIMITS OF INDOOR AND OUTDOOR UNITS ----- 26

INSTALLATION-INDOOR UNIT ----- 26

CONNECT REFRIGERANT PIPES BETWEEN INDOOR AND OUTDOOR UNITS ----- 29

PIPING GUIDE ----- 30

EXPLOSIVE VIEW AND SPARE PARTS LIST ----- 31

DISASSEMBLY PROCEDURE ----- 37

WARRANTY AND TECH. SUPPORT ----- 39

USER NOTES AND SERVICE LOG ----- 40

⚠ CAUTION All Units Shall Be Installed by Experienced or Licensed Contractor Or Technician. Read Manuals before Installation.

⚠ CAUTION Following NEC, State and Local Codes and Installation Instructions of All Units, Otherwise Unit Warranty Will Be Void and Serious Damage To People Or Property May Be Caused.

⚠ WARNING YMGI Group Shall NOT Take Any Responsibilities for Any Damage or Loss Due to Do-It-Yourself(DIY) self-installation and other Improper Installation or Operation or Natural Disaster.

⚠ WARNING Don't Supply Power until All Wiring and Tubing and Checking is Completed. Ground the Unit Following Instructions and NEC, State and Local Codes.

⚠ DANGER Connect All Wiring Securely. Loose Wire or Other Bad Contact May Cause Arc or Overheating and Fire Hazard.

End User Technician Contact of Technical Support-Manufacturer
Toll Free Number: 1-866-833-3138 x 703
Email: techsp@ymgigroup.com

(End user needs to contact installation or service technician to check the unit, before the technicians contact manufacturer technical support-straight technical communication)

KIND REMINDING & WARNING-READ MANUAL(S) BEFORE INSTALLING UNITS

KIND REMINDING

1. Hiring a currently licensed HVAC contractor company who you know and trust, as the only one liable installing party, to take care of ALL the installation job, is the only right choice/starting of all.
2. Not to try to hire a technician to do your job at side which the contractor company doesn't know about.
3. Not to try to install your units partially by yourself or another handyman and then have licensed HVAC technician to do the key work. More than one installation party will make you hard to identify the liabilities if the unit is not working later. DIY or hiring more than one party to install your units will lose your factory warranty.
4. Have your installer read through the manual, before doing any installation.
5. All YMGI products are fully tested to pass rigorous safety and performance standards and other related requirements in its industry, before being packed. We use famous brands high quality of compressors, motors, control boards, valves and other parts.
6. Field Installation takes critical role in putting these units to the similar conditions as we designed and tested in our factory labs, third party labs and various fields/applications following related industrial and company standards.
7. Field installation details matter with all: 1) if your units will work correctly and properly at installation; 2) if your units will work well after your installer leaves your job site; 3) if your units will work well towards or exceeding its lifetime.
8. Typically licensed HVAC technicians will do good job. But, license or experience is just not enough. Every installation needs careful and detailed handling everywhere and every moment, in order to reach higher qualities and better performance and longer lifetime for your installed units.

⚠ WARNING

One or Few of the Following May Fail Your Unit, Even Dry out and Damage Your Compressor Sooner or Later. And These Will Make You Lose Your Factory Warranty.

Common Mistake or Error or Negligence That Some Installer May Generate During the Installation, but You May not Notice or Know Even After Installation is Finished:

- 1) Foreign substances brought into copper line due to many reasons with the most possible one being not capping/covering/sealing copper ends before pulling through structures;
- 2) Not making an oil P-trap in the copper line of the indoor unit that is 18' or more below its outdoor unit;
- 3) Cross-piping or cross-wiring between some indoor units/zones (multiple zone systems, or few single zone systems);
- 4) Not conducting positive leakage testing by charging dry-nitrogen and soap-bubble checking;
- 5) Not conducting negative leakage testing by evacuating the copper lines about 30 minutes and then waiting for at least 5 minutes before checking if vacuum level can be maintained 500 micron or below;
- 6) Not conducting positive prior to negative leakage testing;
- 7) Not selecting right size of wires or proper circuit breaker;
- 8) Kinks in copper line;
- 9) Not making flare well, or not centering flare with that of nut, or not tightening the connections;
- 10) Not trial testing the indoor units one by one, any two, any three...all, in order;
- 11) Not reading technical data (temp./pressure/current) after the system is stabled (normally about 10 minutes after starting). Reading these data before the system is stabled will give false information that you can not count on nor should use to judge whether the units work properly or not.
- 12) Not filling at all, or not filling completely and correctly, the technician checklist inside the warranty registration form that is either inside your manual or coming along with your product(s)...

In the past, we have heard about some bad installations. And so we would pass the benefits of installing units carefully and correctly that we know and good suggestions that we can make, in order to eliminate or limit the trouble that you may encounter during or problems that you may find after your units are installed.

Though you may see some statement in the manual about the consequences of not following our recommendations or not meeting our requirements that may sound strong or imperative or mandatory, if you don't think any of these contents apply to the installation of your units, please put those contents aside.

All we say and we do is towards the ultimate goal to have your units work for you and/or your customers the right way right from its being installed throughout its lifetime as long as possible.



MUST READ

MUST READ

CUSTOMER AND TECHNICIAN MUST READ

PRIOR TO OPENING THE BOX OF, OR INSTALLING /
SERVICING THE PRODUCT (HVAC & R)

Upon the purchasing, unpacking, installation and/or service of this product, you and all other parties hired to install or service your products, have read all YMGI Group (we) has written hereafter and all agree:

- 1) You understand all that is written hereafter in this and other documents that we publish.
- 2) You will follow what is written hereafter in this and other documents that we publish.
- 3) You will be bound by and completely follow all policies, guidelines, instructions, warnings, attentions and other materials, as published by YMGI Group, its subsidiaries or sister companies, in writing.
- 4) Only a successful installation, fully (100%) conducted by a qualified HVAC technician(s), as detailed in the checklist of the **Limited Product Warranty Policy** and **Limited Product Warranty Registration Card/Form**, along with a properly detailed installation invoice, is eligible for the **Limited Product Warranty**.
- 5) Failure to follow what is written hereafter may cause various equipment issues that you will take full responsibility and liability for, including, but not limited to, losing manufacturer's warranty, unit not working properly, unit malfunctions, under-performance, decreased safety, increased potential of various damages to your property, body, home and/or business, etc.
- 6) YMGI documents and policies supersede those made or provided by the sales distributors or installing contractors. YMGI Group maintains the final authority in explaining and resolving any and all discrepancies that might exist between distributors/contractors' documents and ours.

YMGI STRONGLY RECOMMENDS:

- * Customer hires a currently licensed/ certified HVAC technician(s) (N.A.T.E. or A.C.C.A certification is strongly recommended) to conduct 100% of the installation, inspection of all unit functions and repair service.
- * Customer signs an installation/service contract with the installation/service technician's company who has good service references and you trust. Installation and service is very important to the life of your investment and provide you a lifetime of comfort and peace of mind.
- * Customer requests the installer to put down a1-year labor warranty coverage in the installation contract.
- * Have the technician check against all the items in the checklist of the **Limited Product Warranty Registration Card/Form**, sign and date it, to help ensure a proper and professional installation.
- * Customer pays in full, only after all the unit functions are inspected, the unit works properly, warranty checklist is fully filled out and signed and you are fully satisfied.
- * If any unit abnormality is found, have your technician check the unit first. Have them call for manufacturer technical assistance, if necessary, from your job site, not his office, so that we can more accurately assist him in diagnosing the cause of the malfunction.



CUSTOMER AND TECHNICIAN MUST READ

Dear Customer(s)/End User(s)/Unit Purchaser(s)/Installer(s)/Contractor(s)
Thanks for choosing YMGI products.

The YMGI equipment you purchased is either a split-type or a self-contained cooling/heating system which requires an installer's license, certification, knowledge, experience, carefulness and details for a successful and good installation. This equipment is different from those window or portable air conditioners you can normally purchase from local retail stores such as Home Depot, Lowe's, Sears, etc. which the manufacturer may not require licensed personnel to install.

Reading and following the YMGI Group recommendations, suggestions, and requirements, written in the following pages and other documents, is the first step in our hope and effort to help ensure a smooth installation & proper operation of your products for many years.

WHY DOES YMGI GROUP REQUIRE INSTALLATION AND SERVICE TO BE
PERFORMED BY LICENSED OR CERTIFIED HVAC TECHNICIAN/
CONTRACTOR?

- 1) **They have the training and experience to accurately and safely install and service your equipment.**
The equipment runs with high-pressure refrigerant and oil and line-voltage. The copper lines must be installed properly to prevent leakage and foreign substances from contaminating the refrigerant system.
- 2) **You will save money in the long run.**
If any problems occur on the unit that is fully installed by the licensed or certified contractor, they have the training and experience to correct the problem more efficiently. A technician(s) may be unwilling to repair an issue on a unit that they did not install. If you do find a technician willing to perform the service, there is an increased possibility of higher service fees than normal, increased service visits, or delayed service from that technician.
- 3) **It's the law!**
The federal, state and/or local government and authorities have various governing laws or regulations, guidelines, ordinances, etc., requiring only licensed or certified professionals can install and service high pressure HVAC equipment.

SUGGESTIONS, TO AID YOU IN HIRING AN HVAC CONTRACTOR:

- 1) Hire a currently, practicing, licensed/ certified HVAC technician/ contractor. Technicians, who are no longer practicing (retired, etc.) in this field, may not have the updated knowledge or may lack experience on the equipment you have purchased.
- 2) Hire a technician/ contractor who services customers in your local area and you are familiar with. Local contractors have a faster response time and will be easier for you to determine if they are reputable.
- 3) Use only reputable licensed/ certified HVAC installation contractors/ technicians to prevent any unexpected charges as a result from unethical business practices.
- 4) Check their references, to verify they are a good service provider to the general customers. N.A.T.E or A.C.C.A certified technicians are strongly recommended.
- 5) Some contractors/ technicians may not feel comfortable about installing the equipment that you purchase for them to install, and they prefer to purchase and install the equipment. You can contact YMGI directly to check and see if there have been any contractors in your area who have installed our products or similar.
- 6) Ask for a detailed quote for the whole installation project. A flat rate quote is the safest contract for both you and the contractor
- 7) Your local HVAC technicians may charge you on a project basis or on an hourly basis. To our general knowledge and experience, **a full single head installation may normally cost anywhere from \$800 to \$1500**. These costs are estimates and your actual costs may differ due to job nature and location.
- 8) Number of hours can vary depending upon each individual situation, some factors are, but not limited to:
- 9) How difficult or complex the indoor unit is to be securely installed.
- 10) Hoe difficult or how long the inter-connecting pipes and wires are to be installed.
- 11) If all the suggestions have been taken and all the necessary steps are followed.



CUSTOMER AND TECHNICIAN MUST READ

- 12) If the contractor(s)/technician(s) are experienced with the systems/brands you purchase.
You might spend less. But remember, many times you get what you pay for.
- 13) Sign a contract with them. The contract should list all the detailed work they will conduct and the standards they will follow. Some contractors are willing to include a 1-year installation/service warranty at no extra charge. Check with them to see if that is available. If available, include that in the contract.
- 14) Verify and confirm the installation is done completely and all the unit functions have been checked and are working properly, all the items in the checklist have been checked and marked well in the warranty registration card/form, prior to paying the contractor in full.

The cost of not having your unit installed properly can be more expensive than spending the little extra money that hiring the right contractor will cost. Protect your investment and warranty eligibility by doing it right the first time.

THE FOLLOWING LISTS THE JOBS AND RESPONSIBILITIES OF THE TECHNICIAN/ CONTRACTOR:

- * Performing a load calculation for the room(s) you would like to air condition. Cooling requirements will be different from the heating requirements. They will consider cooling hours, heating hours and your special needs or requirements. Supplemental heating such as baseboard heater or portable heater may help you save money by not over-sizing or under-sizing the heating equipment.
- * Selecting the right type, size or model of cooling and/or heating equipment.
- * Determining the best location to install the unit. (Positioning indoor unit, outdoor unit and running the inter-connecting pipes/wires.)
- * Selecting the correct electrical components (HVAC circuit breaker or fuse and disconnect switch for the electric power to the outdoor unit, types and sizes of the connecting wires between circuit breaker/disconnect switch and outdoor unit, and the wires between outdoor unit and indoor unit).
- * Keeping the indoor unit away from the ceiling and the outdoor unit away from the wall, bushes and other obstacles at a proper and safe distance to allow for the proper airflow through the unit's.
- * Placing the units on a secured level structure.
- * Taping and sealing both ends of the inter-connecting pipes, before running them through structures, to prevent dust or other debris from getting into the pipes otherwise they will contaminate and damage the refrigeration system. Failure to follow this practice will make your factory warranty void.
- * Connecting the inter-connecting pipes between the outdoor and indoor units. Checking for leaks through pressurization with nitrogen. After releasing nitrogen, evacuate the piping and indoor unit, for removal of system contaminants. Finally refrigerant introduction and adjustment, if necessary, from the outdoor unit.
- * Back-seating the stopping valves at outdoor condensing unit to release pre-charged refrigerant from outdoor unit to indoor unit.
- * Measuring and recording the electrical voltages at different terminals and the refrigerant pressures at stopping valves of outdoor condensing unit.
- * Verifying and ensuring the unit is connected to the proper electrical power supply.
- * Adjusting refrigerant levels (if necessary) following the installation instructions or chart on the unit.
- * Checking for any unusual noises and other abnormalities that might be present.
- * Operating the unit and check all functions, one by one, and explain to the owner how to operate and maintain the unit.
- * Completing all fields in detail on the installer checklist, signing and dating the **Warranty Registration Card/Form**.

LIMITED PRODUCT WARRANTY

If the installation is successfully and fully done by a qualified licensed/ certified HVAC technician/contractor, the registration card/form is filled completely and correctly, and filed along with a valid installation invoice from the contractor company within 7 days of the original installation, the following standard **Limited Product Warranty** is qualified:
5-year on compressor and 1-year other PARTS ONLY. There is **no labor coverage**.



ATTENTION

- 1) The YMG **Limited Product Warranty Policy**, details the eligibilities, coverage's and other explanations of the warranty terms between YMG group and the unit owner.
- 2) The YMG **Limited Product Warranty Policy** and the **Warranty Registration Card/Form** are either included inside the user's manual and/or installation instruction manual, or come separately in the unit packaging box/envelope. If for any reason they are not included with your shipment, contact our sales or customer service to request a copy (electronic or printed), prior to installation.
- 3) The checklist, in the **Warranty Registration Card/Form**, is for the currently licensed/ certified HVAC technician to fill out completely, while verifying all unit functions are operating correctly. This checklist is for the technician to test and check all details of your unit, to verify and ensure its proper operation.
- 4) The technician must complete all fields in the **Warranty Registration Card/Form**, especially the unit model and serial numbers and distributor information, and most importantly, the technician checklist.
- 5) **Warranty Registration Card/Form** shall be mailed, **along with the original copy of the currently licensed HVAC contractor's full installation invoice**, to YMG Group, within 7-days after original installation, in order for YMG to review and process your warranty registration.
- 6) Keep a copy of **Warranty Registration Card/Form** for your own use in the future, to aid in any possible future warranty claiming, any request of parts, customer service, and/or technical support.
- 7) YMG reserves the right to approve or deny the warranty status based on the information reviewed.

Mailing address of the **Warranty Registration Card/Form**: Warranty Department, YMG Group, POB 1559, O'Fallon, MO 63366, USA.

Following these requirements will aid in ensuring the units will be installed to the general HVAC practicing standards and are necessary factory requirements, to find problems early, prevent possible damage to the unit and help ensure the unit will work properly for its life time.

QUESTIONS ABOUT SELF-INSTALLATION VS HIRING LICENSED HVAC TECHNICIANS

Does YMG allow to do-it-yourself installations (DIY) partially or fully? NO.
Unfortunately no brand or manufacturer can take the responsibility of the equipment if it is not professionally installed by a currently licensed HVAC technician/ contractor.
If unit is installed by non-licensed people, in part or fully, will the factory warranty be void? YES.
Some DIY installations have been successful, but these are exceptions. Most have resulted in equipment failure, due to lack of knowledge and experience. A few of the problems result from DIY's lack of knowledge in the following areas:

- * Sizing and selecting correct type, size and model of cooling and/or heating equipment.
- * Sizing and installing correct electric circuit breakers and wires.
- * Wiring the units correctly and properly.
- * Taping the ends, connecting to indoor and outdoor units correctly and properly.
- * Vacuuming the inter-connecting refrigerant lines.
- * Checking and/or fixing the refrigerant leaks.
- * Checking and/or fixing the condensate drain leaks.
- * Releasing the refrigerant from outdoor unit to indoor unit.
- * Running the unit to check all the unit functions.
- * Conducting the installation or trouble-shooting with correct tools, experience or professional knowledge to correct the problem.

RECEIVING AND FREIGHT DAMAGE

- * Freight (package/unit) shall be checked thoroughly for damage at receiving before accepting by signing on the carrier's delivery paperwork.
- * Upon shipment being signed for acceptance, it becomes a binding document as to the condition of the products on delivery. We cannot process any shipping damage claim, if you accept the delivery.
- * If damage is found at delivery, both you and the delivery driver must make notes on the delivery receipt or other freight paperwork detailing the damage found by marking position/parts on unit, description of damage, time/ date, your name, contact phone, etc. on the delivery documents. Make a copy of the marked delivery receipt.



CUSTOMER AND TECHNICIAN MUST READ

- * If the damage is minor or partial, that you choose to accept, you can contact the distributor or YMGI to discuss the possible replacement of the damaged part.
- * If refusal of the shipment is needed due to severe freight damage, **DO NOT** sign the carrier's delivery receipt document indicating that you accept the products. Mark receipt "REFUSED DUE TO FREIGHT DAMAGE." Sign and date along with the delivery driver's signature and date.
- * Take pictures showing the damage, before the delivery driver leaves.
- * If you accept the delivery or fail to note damage on the driver's delivery receipt, the ability to claim freight damage is lost and YMGI will not replace the unit on this basis.
- * Contact the distributor or YMGI, report the damage by forwarding the marked delivery receipt copy and pictures.
- * Only after YMGI verifies with the carrier the necessary detailed notes of received freight damage, will the damaged products be eligible for replacement.
- * If the returned products are found not damaged, YMGI will treat it as a return and will charge you 25% of product value plus added shipping cost.

RETURN-YMGI GROUP POLICIES & RETURN GOODS AUTHORIZATION (RGA)

All sales are final. If the customer wishes to return a product, the following **Return Policies** apply.

A. Only those products (units, parts or accessories) under the following conditions, are eligible for return:

1) **Products are returned within 30 days of their original shipment date from YMGI**

- 2) Products have not been installed.
- 3) No damage exists on the products being returned.
- 4) No missing products.
- 5) Products and packages are clean.
- 6) No duct tape or marking on the product or box.
- 7) Products are still their original package, in good shape and in re-sellable condition, as YMGI determines.

B. Preapproval steps for your return request:

- 1) Contact your distributor or YMGI to request a return.
- 2) Photograph your product and box to show details
- 3) YMGI will review your request, along with the pictures and any other details pertaining to your request.
- 4) If YMGI agrees to process your return request, a form called **Return Goods Authorization (RGA), along with an assigned RGA #** will be forwarded to your distributor or you.
- 5) Any return without YMGI Group approved RGA#, will not be accepted.

C. YMGI must verify the following before you can pack your products:

- 1) No products (units, parts, accessories) are missing.
- 2) No damage is found.
- 3) The products are in the original packaging.
- 4) No duct tape on any product or box.
- 5) Pictures have been taken and sent to YMGI to verify the product and boxes are not damaged.
- 6) The RGA has been completed and a copy has been returned to YMGI, via email or fax.
- 7) YMGI has approved the request in writing.

D. Shipping Preparation:

- 1) Package all products in a manner in which no damage can occur to the product and secure to a pallet.
- 2) Take and forward pictures of packed pallets for YMGI to verify proper packaging and no existing damage.
- 3) Include the YMGI approved RGA# in the shipping documents.
- 4) YMGI reserves the right to approve or deny any shipments.
- 5) YMGI can arrange shipping for you, but not at YMGI's cost. If this option is chosen, a packing list and BOL will be issued to you through YMGI.
- 6) If the above option is not chosen, you will be responsible for all freight charges. YMGI will not accept any returned items COD.
- 7) Place the package in an area which is accessible to the shipping company for pickup and limits the possibility of damage to the product. Customer must be present at the time of freight pick up.

After shipping, fax the BOL to YMGI Group at 1-866-377-3355 or email to customerservice@ymgigroup.com, detailing the information of the freight company and their tracking number.

E. Freight Damage:

- 1) YMGI Group will inspect returned items
- 2) Claiming of freight damage from a customer hired carrier will be the customer's responsibility.
- 3) Claiming of freight damage from a YMGI hired carrier will be YMGI's responsibility.



CUSTOMER AND TECHNICIAN MUST READ

F. Charges for your return:

- 1) A restocking charge of 25% creditable invoice value.
- 2) All return shipping fees.
- 3) Additional fees will be charged, if products are found to be damaged, missing or used.
- 4) YMGI will notify the distributor of the charges only after the inspection and assessment of the returned products has been completed.

Attention:

- 1) Returned products must be shipped within 7 days of YMGI's releasing of **RGA #**.
- 2) **All RGA** shipping shall be prepaid by the customer. **YMGI will not accept any COD freight.**

YMGI GROUP DISCLAIMING-1:

YMGI Group will NOT accept any return, or may not honor 100% credit for any return of Product(s)/Part(s)/Accessories, in any of the following cases:

- * Return requests made 30 or more days after the date of original sales shipping from YMGI Group warehouse.
- * Return shipment is initiated 8 days or more after the RGA is approved.
- * Returned products received not displaying an YMGI-approved valid **RGA #**.
- * Returned products received C.O.D.
- * Returned products not received in the original packaging.
- * Returned products received with non-repairable packaging, including duct tape or marks on units or carton boxes.
- * Returned products received with missing units/parts/accessories.
- * Returned products received, are found to be non-functional or damaged.

YMGI GROUP DISCLAIMING-2:

- * YMGI Group will not be responsible for any losses of returned unit(s)/part(s)/accessories in transition to YMGI Group warehouse.
- * YMGI Group RGA is valid for seven (7) days from the original issuing date. Returns will not be accepted, if shipping is made 8 or more days after the YMGI Group RGA is issued.

DEFECTIVE UNITS / PARTS / ACCESSORIES-REPAIR OR REPLACEMENT

Out of thousands of units sold every year, there may be an occasional instance your product does not operate properly. Reasons of but are not limited to: **manufacturing, installation, operation, maintenance and knowledge of operator.**

Equipment failure does not automatically denote a product defect from the factory assembly line. The defects can be caused, during production, transportation, installation, operation, maintenance, or service. Defects may NOT be the responsibility of the manufacturer. Nobody willfully or intentionally produces a defective product. No determination shall be made until the technical issue(s) or the causes of the defect(s) are identified.

The defects might be found before/ during installation or in the operation of the unit. Defects can be in the form of blown fuse(s), defective control board(s), damaged remote control, loose or missing screws, etc. These defective parts can be replaced easily.

Some functions of our units are different from what are typical in traditional split type air conditioning and heat pump systems and similar systems made by other manufacturers. These are not defects. Take some time to learn the functions of your unit. We will be happy to assist you with any questions you may have concerning the functions of your new unit.

If a defect is found, whether at the original installation, or during normal operation, we will gladly help you in the following steps in sequence from 1 to 3:

- 1. **Part repair or replacement after trouble-shooting:** This is the most common and generally the easiest and most economical way for all parties, since the problem and all part needs can be accurately and completely identified.

- * Your technician calls our technical support line, from your job site, after checking your units and getting all the information ready.
- * Our technical support will go through several steps, over the phone or through email, with your technician, in order to help identify and resolve the problems. Normally wiring correction, piping correction, part repair/ replacement will resolve the problems.



CUSTOMER AND TECHNICIAN MUST READ

MUST READ

* Your technician will then need to verify and confirm the problem(s) before YMGI can ship out the replacement part(s). Inaccurate or incomplete troubleshooting or part replacement will delay the repair. YMGI technical support will only speak with a licensed/certified technician in regards to the repair of your unit. In our experience this saves time and money for all parties involved.

Your technician is the only person to perform any physical checking, trouble-shooting and replacing of any defective part(s) for your units. Our factory technical support is just a help. **YMGI provided no labor warranty on the products.**

- 2. Unit/part repair at our workshop(s):** Due to the limitations of our technical support not being at your job site, or your technician's experience with our product, the problem may not be resolved as quickly as would be desired. If the problem is still not resolved after attempts between your technician and our technical support, you can elect to have the unit repaired at our facility. If this step is chosen:
- 1) YMGI will send to you the **Customer Request to Ship Products to YMGI Service Center for Inspection and Repair, and Authorization to Charge** form.
 - 2) You will review the form and fill all fields appropriately, sign and send back to the YMGI Group.
 - 3) Once the form has been completed and sent back to YMGI, remove the units and ship back to YMGI.

Please make a note describing the problem and communication history, if possible. Our technicians will check the units and find the problem(s), repair the issue(s), and ship the unit back to you following the conditions set forth in the signed repair agreement. All unit removal and re-installation is done at your cost and must be done by a currently valid licensed HVAC technician.

- 3. Unit replacement:** Only applies to those defects reported within 30 days of original purchase date and if all necessary warranty paperwork had been received and approved. This option applies only if the above steps cannot resolve the problem(s). Either indoor or outdoor unit replacement is available, based on the actual need, at YMGI's determination. **This option shall be the last resort**, due to refrigerant and wiring considerations. All unit removal, re-installation and shipping cost are the responsibility of the customer. YMGI maintains the final authority as to unit replacement. Replacement will be made with the same model only. Alternate units will be treated as a new order.

- Returning Replaced Defective Units/Parts/Accessories After Unit Repair:** (Only applies to steps 1&3 above)
- 1) Repack the replaced unit/ part /accessory in the box which contained the replacement part.
 - 2) Parts can be boxed for UPS, FedEx or equivalent ground service. Units shall be secured onto the skid on which the replacement was shipped after placing into the package from the replacement product.
 - 3) Ship **all** replaced products, to YMGI-designated location. You will be charged if YMGI does not receive the replaced parts.

Standard factory warranty does not cover the cost of materials and labor that are incurred at your site. There will be no cost for the replacement unit, if YMGI determines the defect is manufacturer related. Replacement will be made with the same model, only. Alternate units will be treated as a new order.

CUSTOMER SERVICE / TECHNICAL SUPPORT FROM YMGI GROUP

For questions or help with your unit, contact the original installer or service provider. YMGI Group does not install nor physically service your unit. Your installer or service provider must check the unit prior to contacting YMGI Group from your jobsite, in order to be helped in an efficient and timely manner.

- * Factory customer service at customerservice@ymgigroup.com Tel: 1-866-833-3138x704
- * Factory technical support at techsp@ymgigroup.com Tel: 866-833-3138x703
- * Fax: 1-866-377-3355

An "**YMGI Group Customer Service/Technical Support Daily Log Sheet**" will be filed in writing at our office, for effective communication between you and YMGI Group customer service, your technician and YMGI Group technical support. Before contacting the YMGI Group locate the IP# written at the top of your warranty registration form. Use this IP# whenever you contact the YMGI Group.



DISTRIBUTOR AND MANUFACTURER POLICIES



- * All questions concerning sales or money will be directed to the sales distributor from which you purchased the units.
- * Read and follow all policies set forth from the distributor from which you purchased your unit.
- * Upon purchase and installation of the unit(s), you agree to be bounded by all policies published by both distributors and YMGI.
- * MGI Group has the final authority and supersedes other related parties (distributors, etc.) concerning all policies regarding YMGI products.

IMPORTANT NOTES

SAFETY WARNINGS

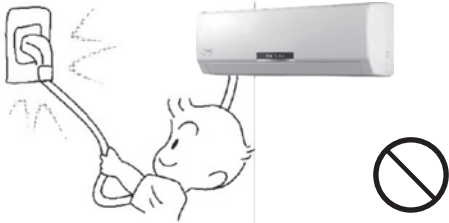
READ THESE SAFETY WARNINGS COMPLETELY PRIOR TO ANY USE

	Ground connection
	Disconnect the plug

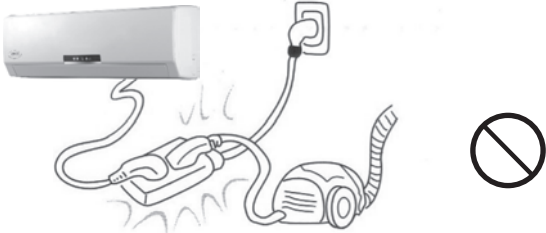
	Forbidden
	Imperative

These precautions are essential and must be strictly observed.

DO NOT draw on the power cord or refrigeration lines. Install them in secured positions. Plastic cover of line set is recommended.



DO NOT use smaller than enough wires. Do not put several circuits to one breaker. Don't use smaller than enough circuit breakers. Otherwise power failure or fire may be caused.



DO NOT pull on the power cord or refrigeration lines. Install them in a secured position. A line set plastic cover is recommended.

DO NOT install the unit in places where there is exposure to flammable materials or gas leakage.

DO NOT use wire or circuit breakers that do not meet electrical safety standards. Several circuits cannot be connected to one breaker.

DO NOT wire or open the unit while it is running. Make sure to shut off all circuits prior to inspecting or servicing the unit.

DO NOT install unit in a damp laundry room or near flammable gas. All units must be protected by certified electrical circuit breakers and in accordance with all safety codes.

DO NOT use the unit in cool or dry mode for prolonged periods where humidity is higher than 80%.

DO NOT blow the cold air directly towards people for prolonged period. Otherwise, people may get cold.



DO NOT wire or open unit while unit is running. Sparks or fire may occur. It may cause a shock to people.



DO NOT install the indoor unit close to cooking surfaces or ventilation systems. Poor placement could inhibit peak performance.

DO NOT blow cold air directly towards people for extended periods.

DO NOT use chemical solvents, flammable insecticides, or abrasive materials. Clean the unit only with a soft dry cloth or rag.

DO NOT continue to operate the unit if there is any abnormal odor, burning, scorching, or smoke. Stop and disconnect the unit immediately.

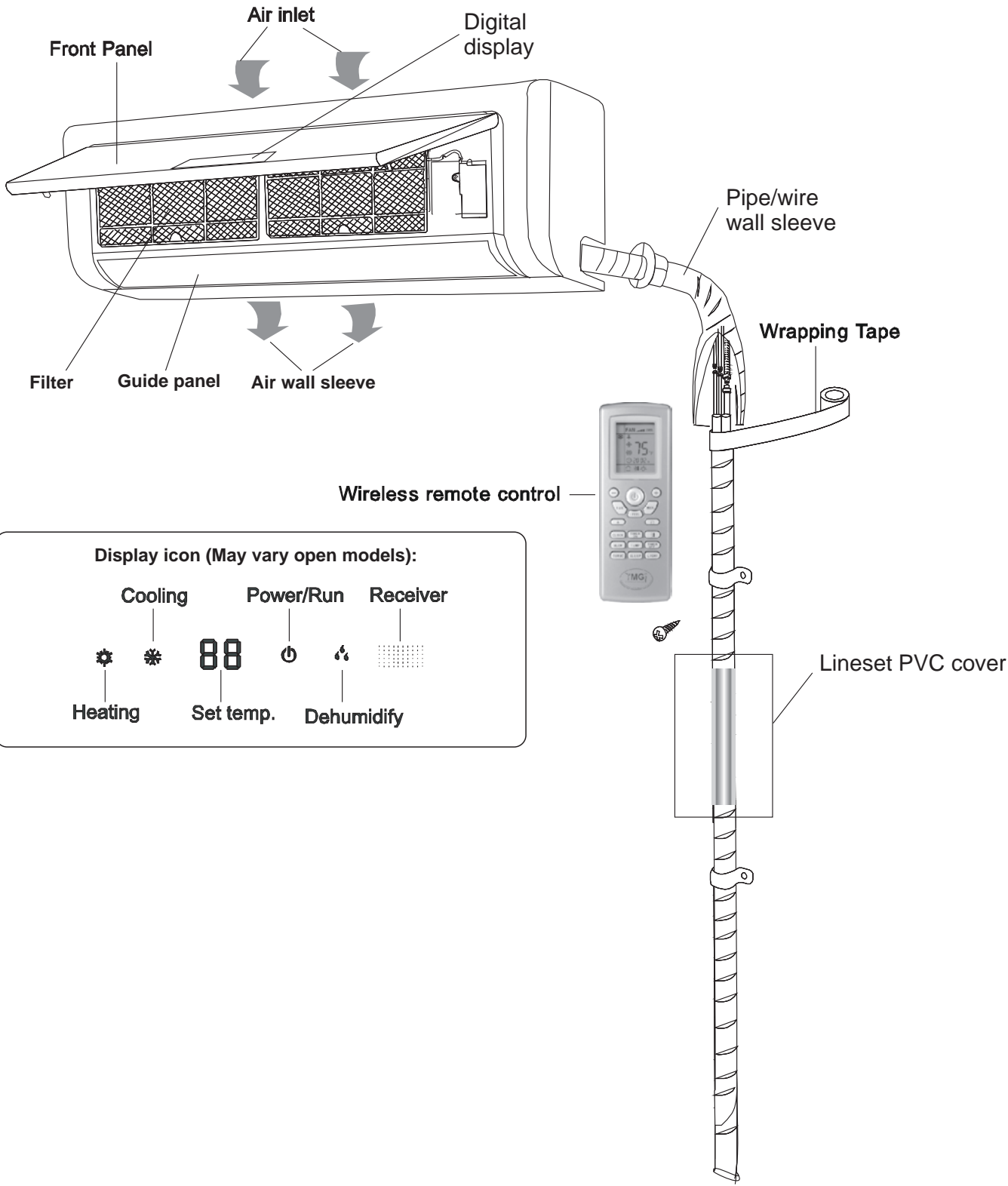
DO NOT use the system for anything other than what it was designed for or any non-HVAC purposes. Do not store near food, paint, or other chemicals.

DO NOT operate the unit for prolonged periods without refreshing ambient air. Opening a door or window periodically will suffice.

BRIEF UNIT INFO



PART NAME



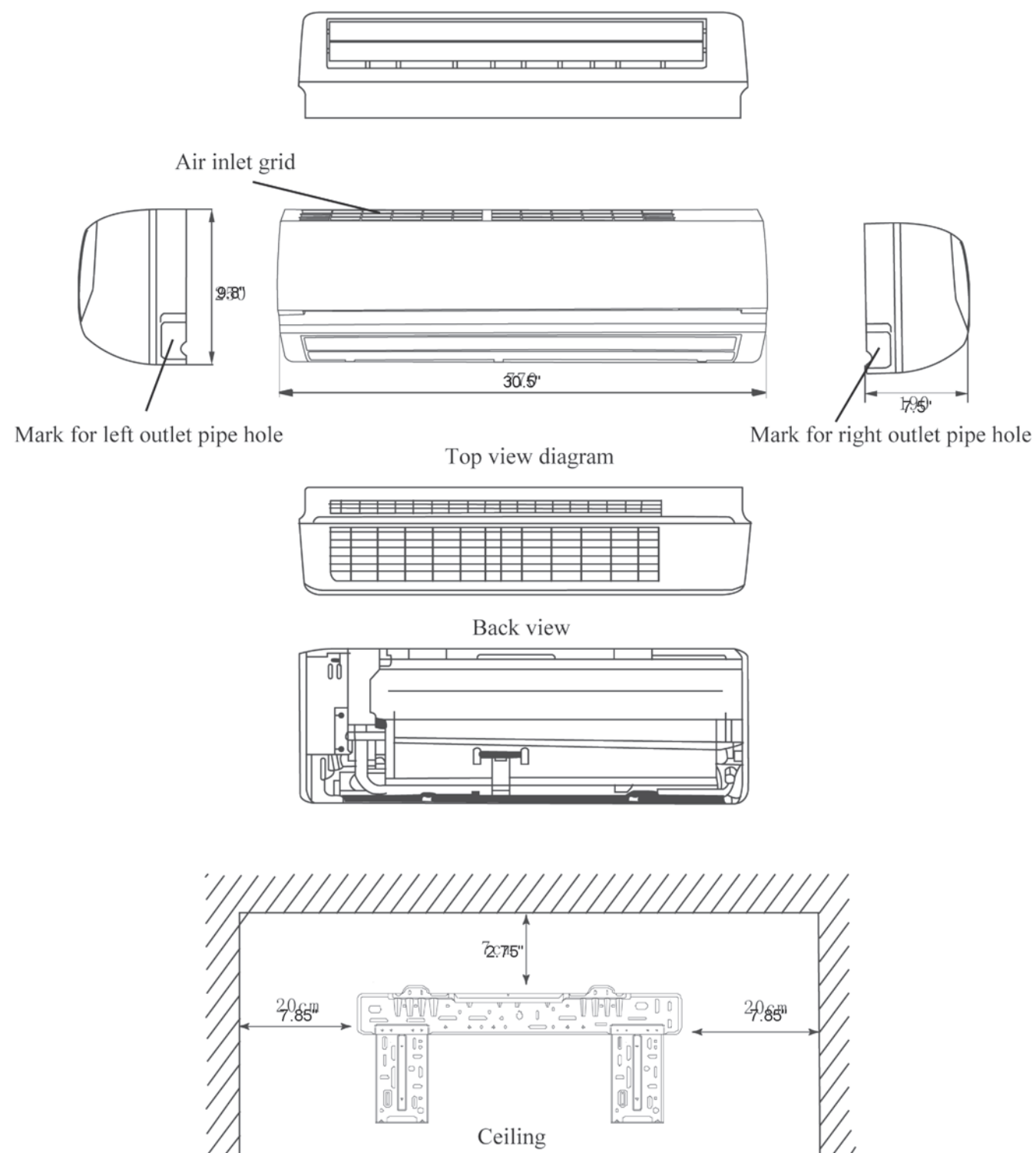
Notes: Actual unit/ part appearance and installation may vary from the illustrated.
Subject to continuous improvement and change without notice.

TECHNICAL SPECIFICATIONS

Item		Indoor Unit-Wall Mount Type Performance Data		
		WMMS-09EW-V2B(59) (2)	WMMS-12EW-V2B(59) (2)	WMMS-18EW-V2B(59) (2)
Power Supply		208-230/1/60		
Total Capacity (Btu/h) (High/ Standard/Low)		AC:10480/8850/4235 HP:10980/9350/3000	AC:13880/11850/4300 HP:14380/12850/3050	AC:22230/17850/5800 HP:24880/18850/3900
Nominal heating capacity (ID 70/60 OD 47/43F)		9350	12850	24850
Standard Set-up Tested in Lab-Heating capacity (ID 70/60 OD17/15F)		8400	10800	16200
Standard Set-up Tested in Lab-Heating capacity (ID 70/60 OD 5F)		7580	8680	14280
SEER		16.0	16.0	16.0
HSPF		8.2	8.2	8.2
Dehumidifying Volume (Pints/Hr.)		1.7	2.5	4.2
Fan Motor Speed (RPM) (SH/H/M/L)		1150/1050/900/750	1250/1050/950/800	1350/1200/1050/900
Air-throw (ft.)		30-25		
Air Flow Volume (CFM) (SH/H/M/L)		280/250/240/220	330/290/260/220	500/460/383/324
Output of Fan Motor (W)		14	20	20
Input Power of Heater (W)		/	/	/
Fan Motor Capacitor (uF)		1	1	1
Fan Motor RLA(A)		0.17	0.21	0.28
Fan Type-Piece		Cross flow fan 1	Cross flow fan 1	Cross flow fan 1
Fan Wheel Diameter x Length (Inches)		3.82 x 23.0	3.6 X 24.3	3.8 X 31.4
Evaporator Heat Exchanger Type		Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube
Connection Copper Size Liquid/Gas (Inches)		1/4+3/8	1/4+1/2	1/4+1/2
Swing Motor Model		MP28VB	MP28EC	MP35XX
Output of Swing Motor (W)		2	2	2.5
Fuse (A)		PCB 3.15A Transformer 0.2A	PCB 3.15A Transformer 0.2A	PCB 3.15A Transformer 0.2A
Sound Pressure Level dB (A) (H/M/L)		38 / 34 / 31 / 28	40 / 34 / 32 / 30	46 / 43 / 40 / 36
Sound Power Level dB (A) (H/M/L)***		48 / 44 / 41/ 38	50 / 44 / 42 / 40	56 / 53 / 50 / 46
Dimensions of Indoor Unit (W x H x D) (Inches)		30.3 X 9.8 X 7.5	32.7 X 11.2 X 7.9	40.2 X 12.2 X 9.0
Dimensions of Indoor Unit Package (W x H x D) (Inches)		33.7 X 13.0 X 10.7	35.7 X 15.2 X 10.4	42.4 X 12.8 X 15.4
Net / Gross Weight (LBs)		18.7 / 27.5	24.3 / 30.8	28.6 / 37.4
Loading Quantity	20' Container	378	240	207
	40' Container	792	480	431
	40' HQ Container	890	540	488

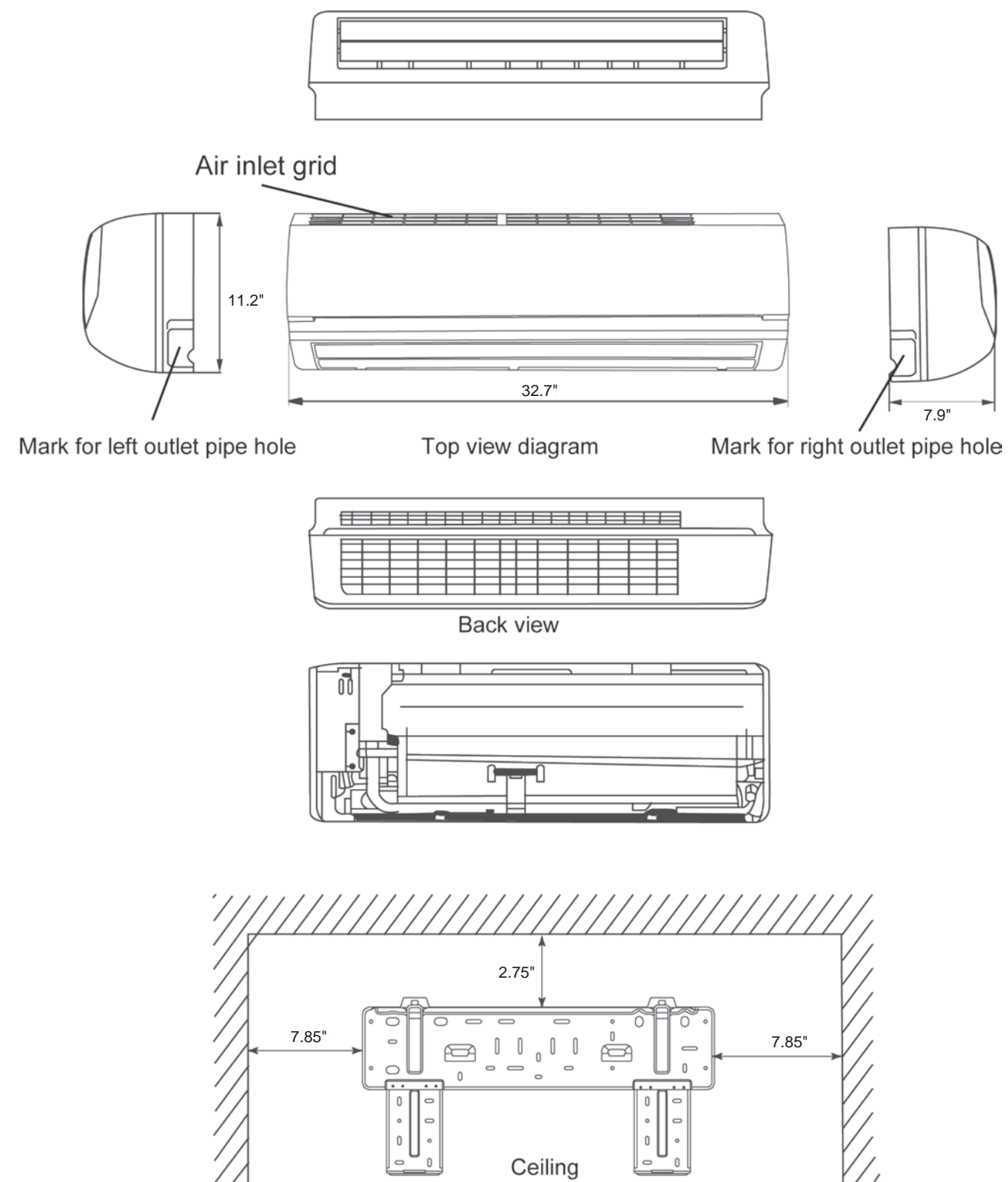
UNIT VIEWS,DIMENSIONS & MOUNING BRACKET CLEARANCE

WMMS-09EW-V2B(59) (2) / WMMS-12EW-V2B(59) (2)



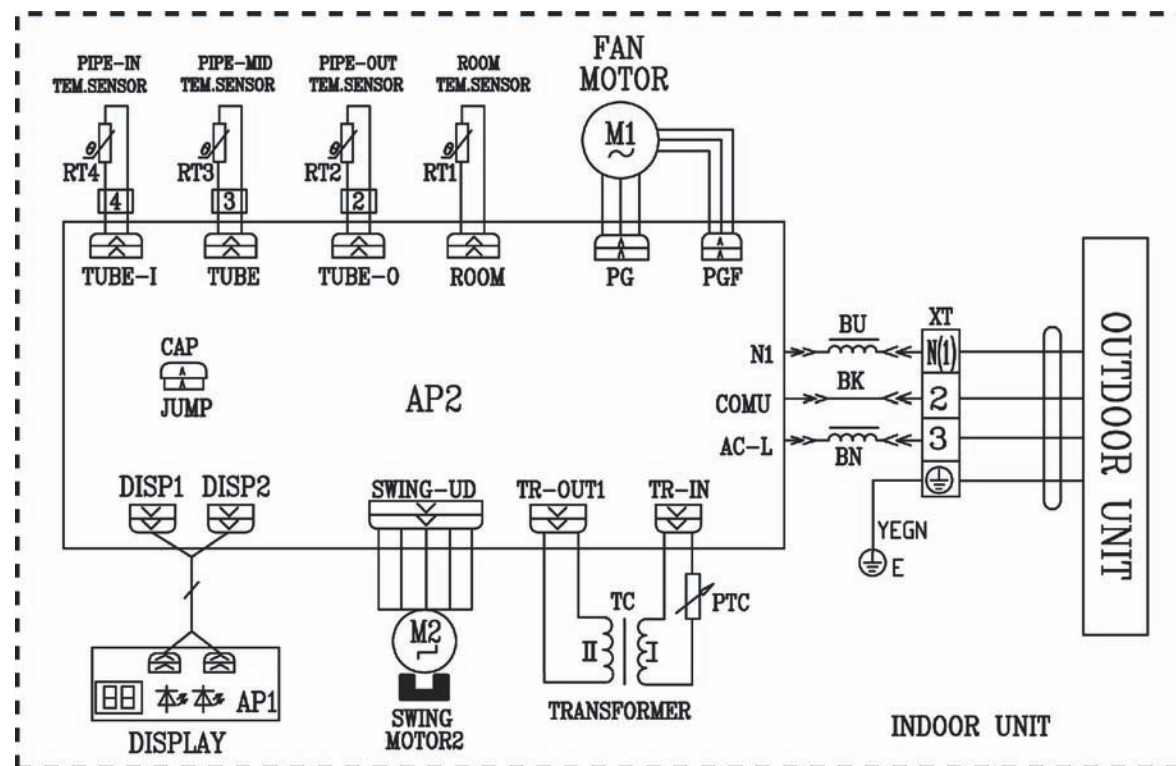
UNIT VIEWS,DIMENSIONS & MOUNING BRACKET CLEARANCE

WMMS-18EW-V2B(59) (2)

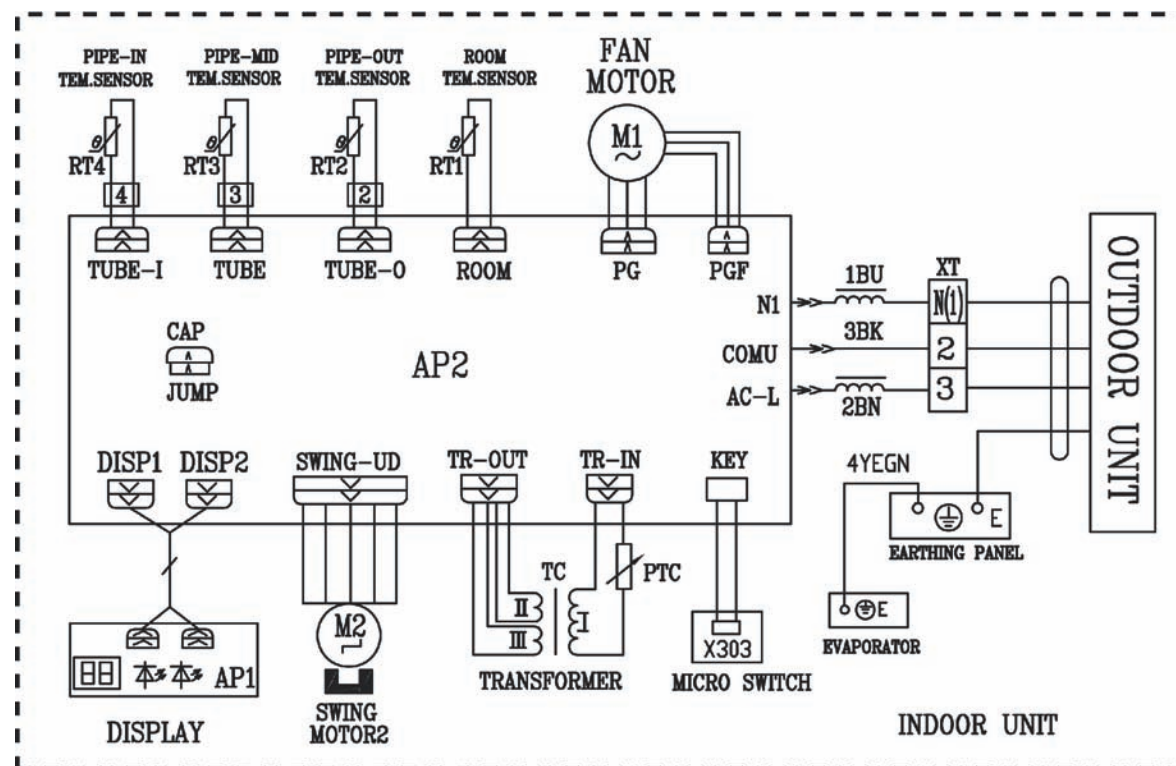


WIRING DIAGRAM

WMMS-09EW-V2B(59) (2) / WMMS-12EW-V2B(59) (2)



WMMS-18EW-V2B(59) (2)



These circuit diagrams are subject to change without notice, please refer to the one supplied with the unit.

REMOTE CONTROL & UNIT FUNCTIONS

CONTROLLER FUNCTION

Temperature Parameter

* Indoor ambient temperature (Tamb.)

* Indoor copper tube temperature (Ttube)

* Evaporator inlet pipe temperature (Tinlet pipe)

* Evaporator outlet pipe temperature (Toutlet pipe)

Basic Functions

Cooling Mode

- 1) Fan motor and swing works under setting status
- 2) Indoor unit will run under the original status when outdoor unit malfunction or stop to run protection, malfunction displays.
- 3) The fan motor stops when the modes conflicts.
The temperature setting range is 61-86°F under the mode.

Dry Mode

- 1) Fan motor runs under low speed, swing runs by setting status.
- 2) Indoor unit will run under the original status when outdoor unit malfunction or stop to run protection, malfunction displays.
The temperature setting range is 61-86°F under the mode.

Fan Mode

In this mode, only indoor fan is running at setting status. Under auto fan speed, it will run by cooling auto fan.

Heating Mode

- 1) The indoor unit goes to anti-cool wind when the unit is ON; it goes to blow residual heat when the unit is OFF and indoor fan motor was ON before.
- 2) Protection function, compressor is OFF as malfunction (including any temperature sensor malfunction), indoor fan motor runs with blowing residual heat.
- 3) Anti-cool wind: indoor fan motor runs after 2 minutes delayed.
Blow residual heat: the indoor unit runs 60S with the original fan speed then stop; the fan speed cannot shift and the guide board changes to the heating minimum angle when blowing residual heat.
- 4) Indoor fan motor stops and does not blow residual under defrost and oil return; the temperature sensor of indoor unit cannot be inspected during defrost, oil return and exit in 3min process.
The temperature setting range is 61-86°F under the mode.

Auto Mode

In this mode, the unit will select the cooling, heating running mode or fan mode automatically according to the change of ambient temperature. Protection function is the same as that in heating, cooling mode.

Mode Clash

When the indoor receiving the information mode clash from outdoor unit and the digit is 1, the indoor load (indoor fan motor, swing) stops, the malfunction indicator displays, the mode send to outdoor unit is the mode received by remote control.

When the time of TIMER ON reach, if the indoor receiving the information mode clash from outdoor unit and the digit is 1, the indoor load (indoor fan motor, swing) stops, the malfunction indicator displays, the mode send to outdoor unit is the mode received by remote control.

Other Functions

Buzzer

When the controller energized, receiving signal from remote control and auto button, the buzzer will beep.

Auto Button

Press the button when turn off the unit, the unit runs by auto mode, indoor fan motor runs under auto fan speed, turn on swing. Press auto button under the unit is ON, it will OFF.

Auto Fan Speed Control

Under cooling, heating, fan mode, the indoor fan motor will select the high, med, low fan speed automatically according to the change of ambient temperature, the auto fan speed is low speed under FAN mode. The spacing of shift each fan speed is 3.5 min.

REMOTE CONTROL & UNIT FUNCTIONS

Sleep Function

In cooling and fan mode, after setting sleep procedure 1h, T preset will increase 1°F; 2h later, T preset will increase 2°F, then remain the temperature, T preset will not exceed 86°F; under heating, after setting sleep procedure 1h, T preset will decrease 1°F; 2h later, T preset will decrease 2°F, then remain the temperature, T preset will not exceed 61°F; the setting temperature will not change under fan and auto mode.

Timer Function

General timer:

- a. TIMER ON: The timer on can be set when the unit is OFF, the controller will run under original setting mode when the time of timer on reaches, the timer space is 0.5h, and setting range is 0.5-24h.
- b. TIMER OFF: The timer off can be set when the unit is ON, the unit is OFF when the timer time reaches, the timer space is 0.5h, and setting range is 0.5-24h.

Clock timer:

- a. TIMER ON: If set timer on when the unit is running, it will keep running. if set the timer on when the unit is off, the unit will run with the pre-setting mode when the time of setting timer on reaches.
- b. TIMER OFF: If set timer off when the unit is off, when setting timer off, the unit will maintain stand-by status; if set timer off when the unit is on, when the time of setting timer off reaches, the system will stop to run.
- c. TIMER changing: When the unit under timer status, it can set ON and OFF by remote control, and reset timer time, the unit will run under the last setting status.

Set timer on and timer off together when the unit is running, the unit will maintain the current status, once the time of setting timer off reaches, the unit will stop to work.

Set timer on and timer off together when the unit is off, the unit will maintain off status until the time of timer on reaches, the unit will start to work, hereafter the time of timer on reaches everyday, the unit will run under the original setting mode, and the unit stop to work when the time of timer off reaches.

When the time of setting timer on and setting timer off is the same, the unit is off.

Memory Function

Memory contents: mode, swing (up and down), light, set Temp., set fan speed, general timer (clock timer doesn't memory)

The unit will on automatically with memory content after re-energized.

There is no setting timer function in the last remote control order, and the system memory the last remote control order and working under that setting method.

There is general timer function in the last remote control order, the system is energized before the timer time haven't reach, the unit will memory timer function of the last remote control order after re-energized, and the timer time will star to calculate after re-energized.

There is timer function in the last remote control order, but the timer time reaches, the system will de-energize after timer on and timer off, after re-energized, the system will memory the running status which before power-off, and no timer action; the clock timer doesn't memory.

U-TOUCH Function

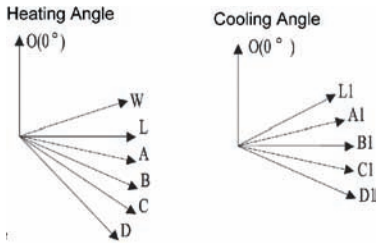
If controller receives U-TOUCH command, it will run at the ambient temp sent by remote control (but it will also run at sampling temp. of AC temp sensor itself except defrost and anti-cool air). The remote control will send ambient temp to controller every 10min, so if the controller hasn't received ambient temp from remote control after 11min, it will run at temp. of AC itself. If this function is not set, all ambient temp will adopt sampling value of AC temp. sensor itself.

Turbo Function

The TURBO function can be set only under COOLING and HEATING mode, when controller receiving turbo order, the indoor fan motor will run with high speed, and send turbo signal and high speed to outdoor unit.

Swing (up and down) Control

After energization, up & down swing motor will totate guide louver to position 0 to close air outlet. After turn on the unit, if swing function has not been set, up & down guide louver will clockwise turn to position D under heating mode, or clockwise turn to level position L1 under other modes. If the unit is turn on with swing function setting, guide louver will swing between L and D. There are 7 kinds of swing states of guide louver. Position L,A,B,C,D, swing between L and D, stop between L and D (included angle L and D is equiangular). Upon stop of unit, guide louver will close to position 0. Swing action is valid only when swing command is set and indoor fan is running.



REMOTE CONTROL & UNIT FUNCTIONS

Cold Plasm Function

Remote control the cold plasm function to ON and turn on the cold plasm when the fan motor is ON; remote control the cold plasm to OFF or turn off the cold plasm when the dan motor is OFF.

Unit Display

Basic Display

- 1) When the unit is energized, the display symbol display, then only power lamp is light.
 - 2) When use remote control to turn on the unit, the running LED is light, and the current setting running mode lamp displayed at the same time.
- COOLING: running lamp and cooling lamp are light; HEATING: running lamp and heating lamp are light; DRY: running lamp and dry lamp are light; FAN: running lamp and fan lamp are light; AUTO: auto lamp, running lamp and actual running mode lamp are light.
- (3) If turn off the LIGHT button, all the display is off (it is valid when the unit is OFF).
 - (4) After set SLEEP function, the display maintains the original display status, it means the light switch does not influence sleep function.

Dual-8 Display

If the digital pipe display current setting temperature, the setting temperature range is 61-86°F. It will display 77°F for cooling and fan under auto mode, and display 68°F for heating, and the cooling controller displays 77°F. The temperature range is 32-86°F when the indoor temperature displays.

Fan Speed Display

There are 3 status dynamic circle display for fan symbol, they are middle two segments, middle four segments and display six segments, and the middle two segments is displaying. The fan speed symbol blinks the fastest when remote control super-fan; the fan speed symbol blinks the lowest when remote control low-fan; the blink speed of display symbol is between high fan and low fan when remote control med fan; the blink speed of display depends on the indoor actual running speed when remote control auto fan speed; if the indoor fan motor stops, it blink display at the lowest speed.

Indoor Unit Malfunction Lamp Display

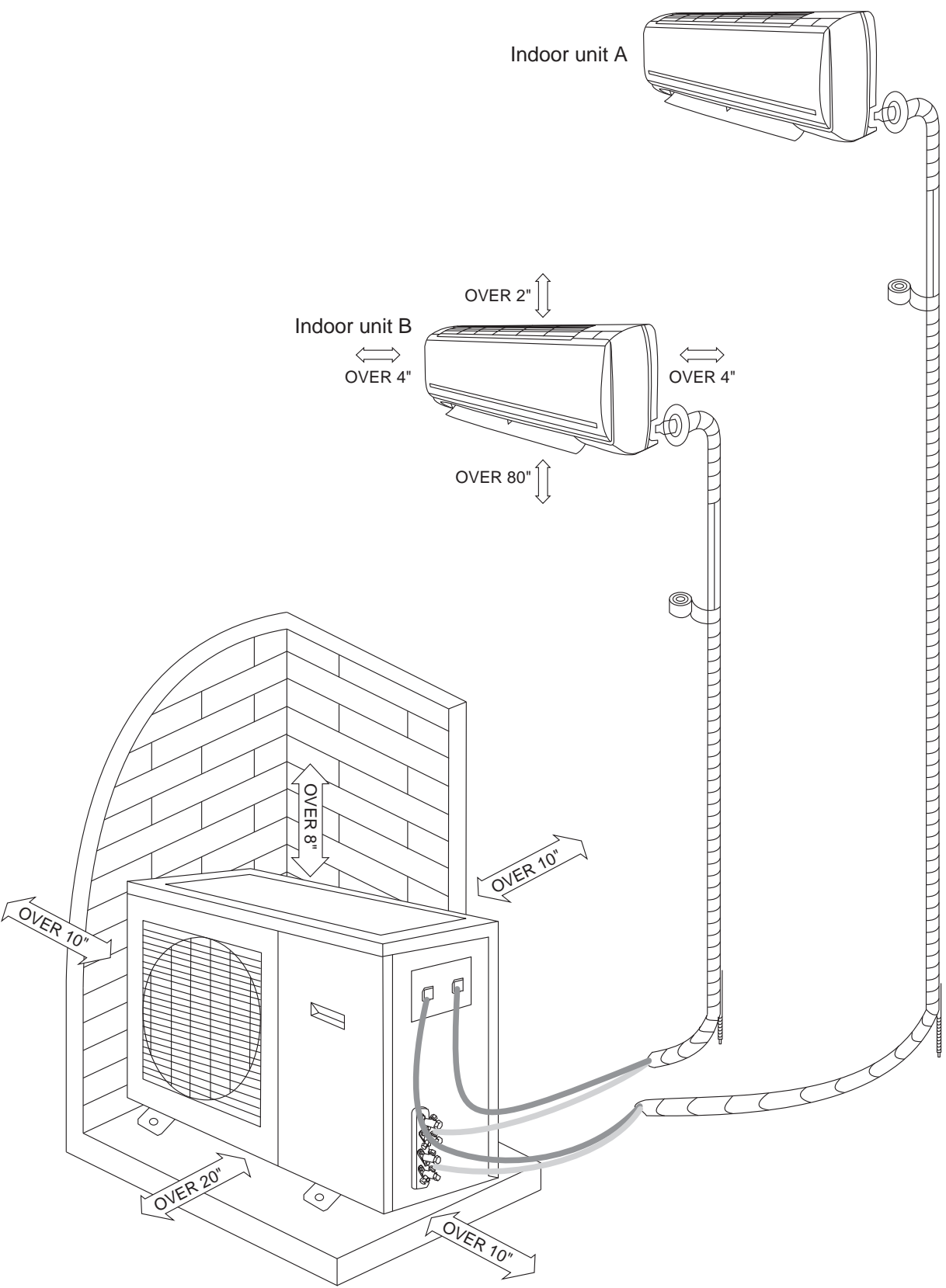
Mal Malfunction Name	Dual-8 Display	Running Lamp	Heating Lamp	Cooling Lamp
The system is abnormal (anti-high temp. power off, cooling overload)	H4		Blink 4 times	
Compressor overload protection	H3		Blink 3 times	
Module protection	H5		Blink 5 times	
High-pressure protection	E1	Blink once		
Anti-freeze protection power-off	E2	Blink twice		
Discharge temperature protection	E4	Blink 4 times		
Low voltage over-current protection	E5	Blink 5 times		
Mode clash	E7	Blink 7 times		
Communication malfunction	E6	Blink 6 times		
Defrost or heating oil return	H1		Blink once	
The indoor ambient temperature sensor is open, short circuit	F1			Blink once
Any indoor evaporator temperature sensor is open, short circuit	F2			Blink twice
The outdoor ambient temperature sensor is open, short circuit	F3			Blink 3 times
The outdoor condenser temperature sensor is open, short circuit	F4			Blink 4 times
The outdoor discharge temperature sensor is open, short circuit	F5			Blink 5 times
Fail to start up	H7		Blink 7 times	
PFC malfunction	HC		Blink 6 times	
Compressor demagnetizing protection	HE		Blink 14 times	
The malfunction below need used by to be remote control, it will display when press sleep button 6 times continuously in 3S, and exit inspect state(it is not valid under auto mode) automatically in 5min, or will exit when press sleep button 6 times continuously in 3S.				
Cooling overload down frequency	F6			Blink 6 times
Unit overflow down frequency	F8			Blink 8 times
Compressor discharge down frequency	F9			Blink 9 times
Unit AC voltage decreasing down frequency	E0	Blink 10 times		
Heating anti-high temperature down frequency	H0		Blink 10 times	
Anti-cool air protection	E9	Blink 9 times		
Cooling oil return	F7			Blink 7 times

Note: The malfunction code will circulate display when different malfunctions exist together. The indicator will light 0.5S and display 0.5S when it blinks. The indoor temperature sensor malfunction will not be inspected during defrost, or oil return period.



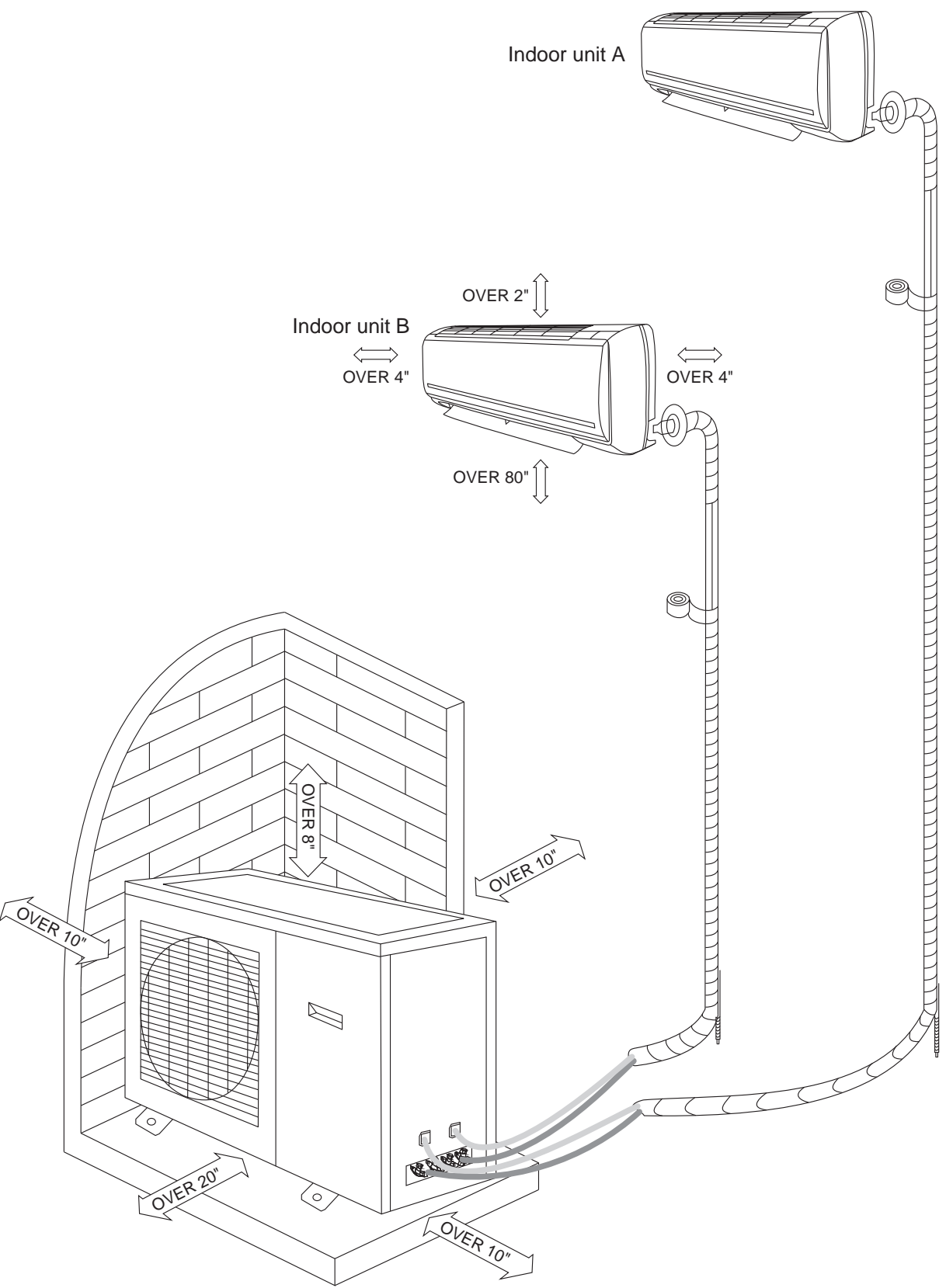
SYSTEM LAYOUT & INSTALLATION CLEARANCE

CLEARANCE REQUIRED AROUND UNITS-DUAL ZONE-1



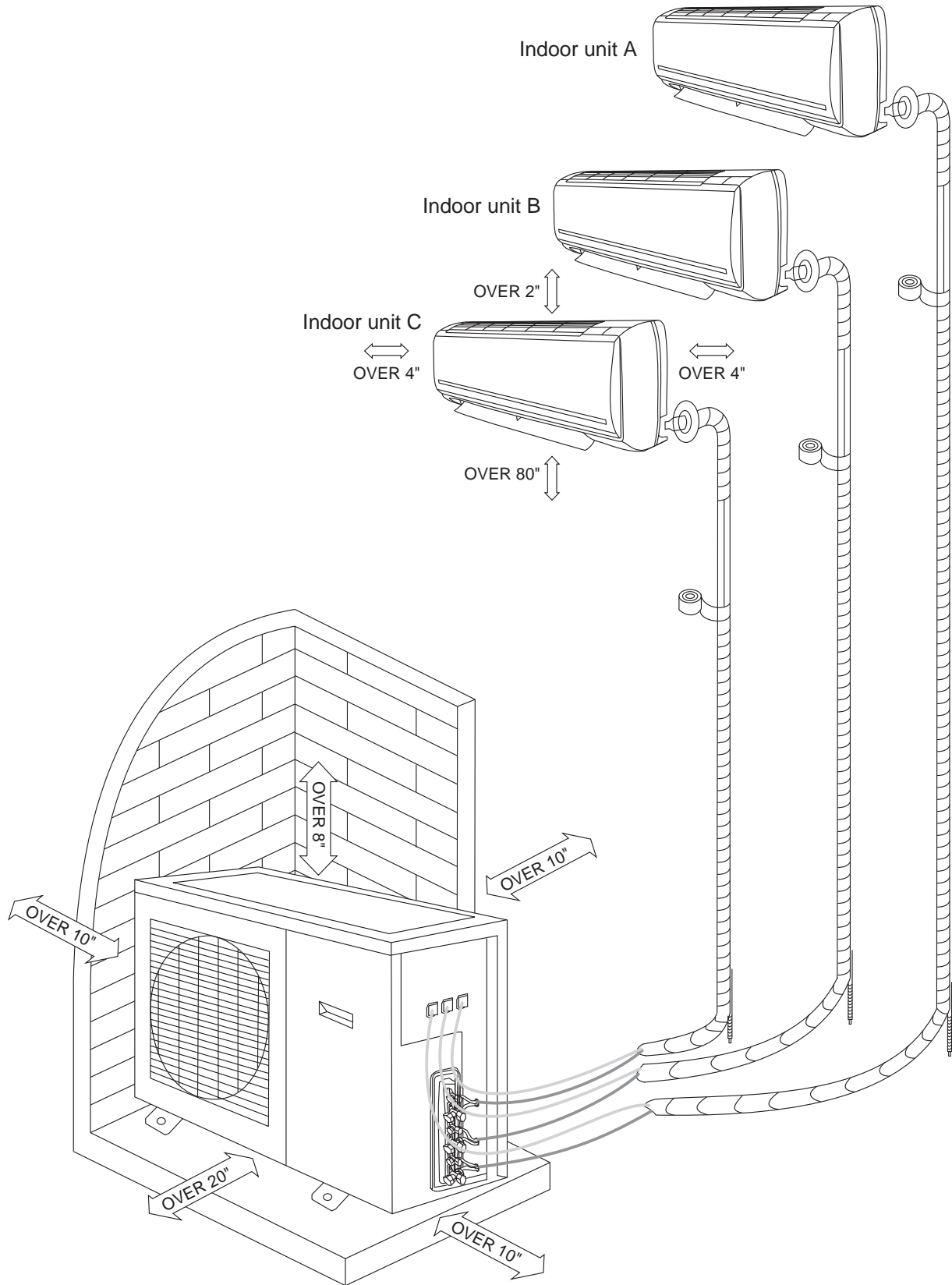
SYSTEM LAYOUT & INSTALLATION CLEARANCE

CLEARANCE REQUIRED AROUND UNITS-DUAL ZONE-2



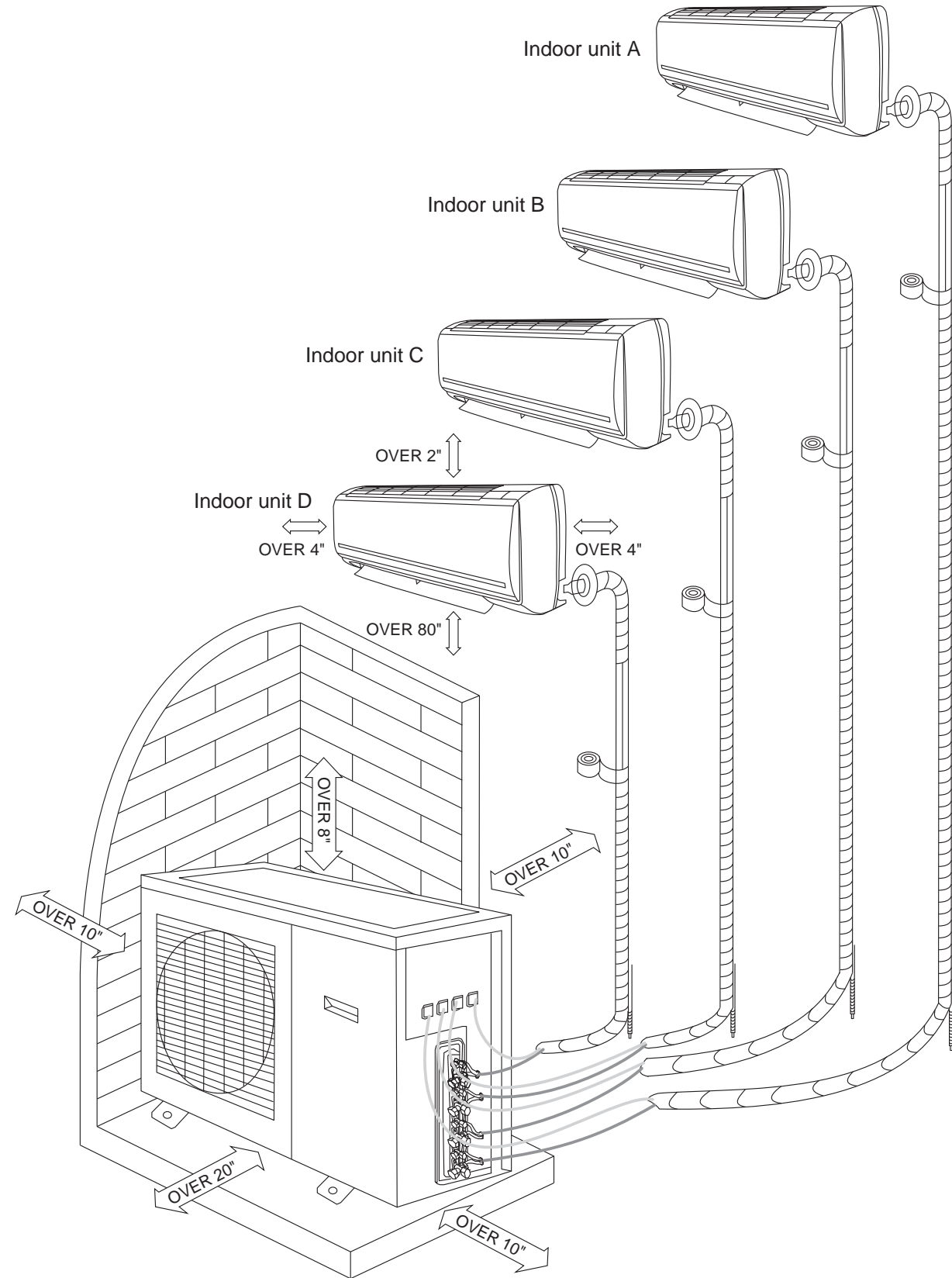
SYSTEM LAYOUT & INSTALLATION CLEARANCE

CLEARANCE REQUIRED AROUND UNITS-TRIPLE ZONE



SYSTEM LAYOUT & INSTALLATION CLEARANCE

CLEARANCE REQUIRED AROUND UNITS-QUAD ZONE



INSTALLATION LOCATIONS & CAUTIONS

- * The location and structure shall also be convenient for both installation and service.
- * The location shall NOT be where discharge air and noise could bother your neighbor.
- * The location shall NOT be somewhere drain may cause any damage to property or bother the neighbor.
- * The location shall NOT be somewhere soldering or torching work may cause fire or smoke to the materials around.
- * The location shall NOT be somewhere near flammable gases.
- * The location shall NOT be in or close to corrosive gases.
- * The location shall NOT be somewhere children can access.

CAUTION All Units Shall Be Installed by Licensed Contractor or Technician.

CAUTION Read Manuals before Installation.

CAUTION & SUGGESTIONS TO FOLLOW PRIOR TO INSTALLATION

Check the unit for damage and missed parts or accessories. If damage is found or parts are found missing, call the distributor right away.

Spin fan wheels or blades to check if and make sure they can rotate freely. If fan wheel scratches with housing, call the distributor right away and do not to proceed with the installation before it is fixed.

Check the unit to make sure no foreign materials has been left in the unit.

Check all the parts and accessories that are needed other than those provided with the unit. It is strongly recommended to only use YMGI supplied or recommended parts and accessories.

Be sure a properly sized circuit breaker is for the electric power to the units.

Pre-build the support platform on the ground or bracket for the wall before or during construction and before installation. Refer to the table below for footprint dimensions.

Read installation instructions of all units thoroughly.

Ask rep./distributor/us anything you are not sure about.

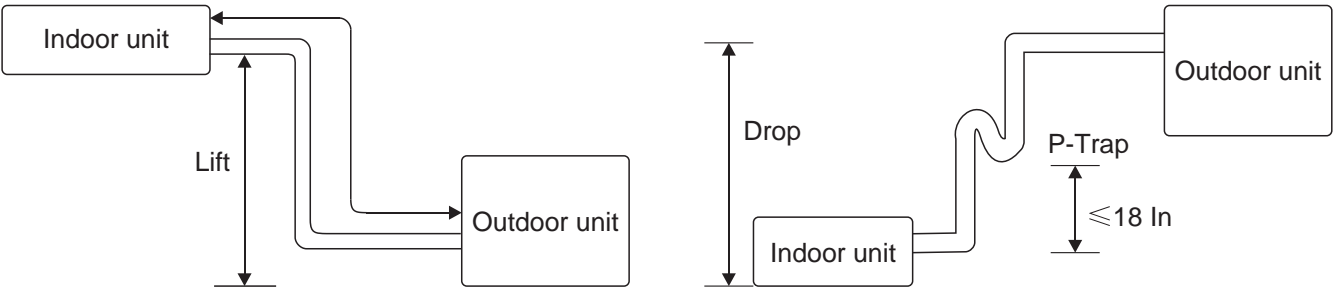
Get your tools and parts ready for installation.

PIPING AND WIRING SIZES-UNITS MADE AFTER 05/2010

Unit	Connection Copper Pipe Sizes	Min/Max.Length +/- Elevation	Wires from Outdoor to Indoor Unit	Mini. Wire Size Outdoor-Indoor Units	Fuse Is Factory Installed
09K	1/4+3/8"	15/30/30/15	N(1)/2/3/G	16AWG	At Indoor Control Board
12K	1/4+3/8"	15/30/30/15	N(1)/2/3/G	16AWG	At Indoor Control Board
18K	1/4+1/2"	15/30/30/15	N(1)/2/3/G	16AWG	At Indoor Control Board

HEIGHT LIMITS OF INDOOR AND OUTDOOR UNITS

- * Either the indoor unit or the outdoor unit can be higher, but the height difference must comply the stated requirements.
- * Try to reduce the bending of the piping line as much as possible so as to avoid possible negative impacts upon the performances of the units.
- * Make P-trap if elevation drop difference is more than 25", as illustrated below.



Refrigerant Pipe Min/Max. Length, Rise and Drop Height

1,000 Btu/h	Min. Length (Ft.)	Max. Length (Ft.)	Max. Rise Height (Ft.)	Max. Drop Height (Ft.)
09-12	15	50	20	28
18-24	15	75	25	35
30-36	15	100	35	50

INSTALLATION-INDOOR UNIT

INSTALL WALL MOUNT PLATE

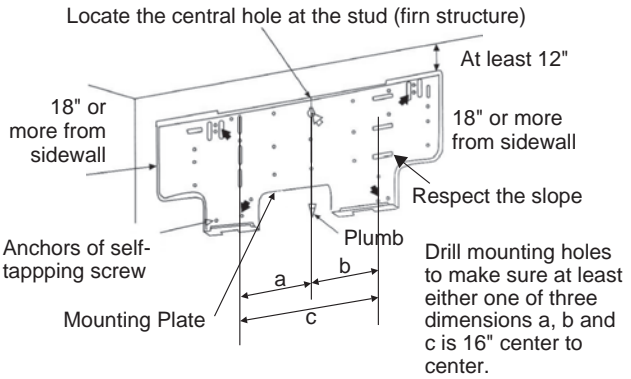
- * Check unit to make sure the unit is good shape and ready to install.
- * Check to make sure the installation location is firm enough to hold the weight of the whole unit and is convenient to installation, maintenance, service and close to the indoor unit but not causing noise or airflow issues to neighbour.
- * Install Indoor unit. Enough anchor bolts/nuts shall be used to secure mounting plates for indoor units. Brackets should be at level position.

Install Mounting Plate and Drill Hole for Combination of Copper Line/Wire Cable/Drain Hose

NOTES:

Anchors must be put into the holes, where the solid arrows are pointing, as shown above, to secure the mounting plate firmly and to hold the weight of indoor unit. If more screws/anchors are to be used, make sure to keep the two holes close to each other, at least 2 inches apart.

Mounting plate should be attached to the structural part of the wall. Minimum clearance, as shown below, is required in order to ensure proper airflow and enough service room.



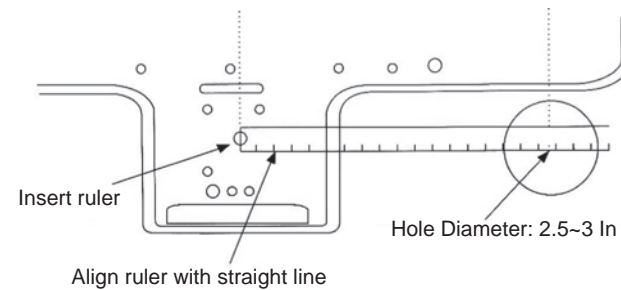
Steps To Mount Plate:

- * Mark drill positions. At least 4 anchor holes, one at each perimeter corner of the plate are needed to secure the plate, where the bold arrows are pointing, as shown in the picture above. Refer to the specification sheet for unit weight so that enough anchors are installed at proper positions.
- * Pre-drill guiding holes where are marked for anchors or screws on the wall
- * Confirm the position of the holes and finish drill to the depth needed for anchors (NOT for screws)
- * Align mounting plate holes with those holes drilled on the wall and put anchors or screws into the holes to secure mounting plate.

INSTALLATION-INDOOR UNIT

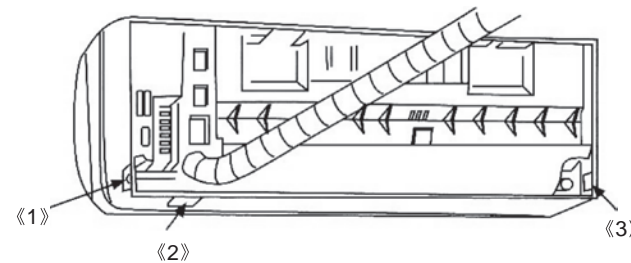
DRILL 3IN HOLE FOR PIPING/WIRING/DRAIN

- Locate the centre where the hole will need to be drilled.
- Drill the holes of 2.5-3Inch diameter. A down pitch about 1/4" per foot, as illustrated below, is needed for the hole, in order to drain the condensate properly.



PREPARE INDOOR UNIT- COPPER LINE SET/DRAIN HOSE

- If pipes need to come out of the right side (facing the front of indoor unit) of the indoor unit, snap off portion «1» on plastic casing.
- If pipes need to come out of the bottom side (facing the front of indoor unit) of the indoor unit, snap off portion «2» on plastic casing.
- If pipes need to come out of the left side (facing the front of indoor unit) of the indoor unit, snap off portion «3» on plastic casing.



PREPARE INDOOR UNIT- COPPER LINE SET/DRAIN HOSE

- If pipes need to be rerouted to a different direction from the one preset at factory (towards left side, if facing the front cover of indoor unit), lay down the indoor unit on soft cushion or foam. Don't rub the plastic casing.
- In order to keep from pipe damage, need to bend the copper tubing set gently and slowly (finish bending no less than 10 seconds/90 degree), by holding at the root of the original 90 degree bend nicely and firmly. Don't rub two copper lines during bending. Better to cut off the insulation and bend the two pipes one by one, not two together.

- If pipes need to come out of the rear side (facing the front of indoor unit) of the indoor unit, no need to snap off anything.



Slice the insulation before bending.

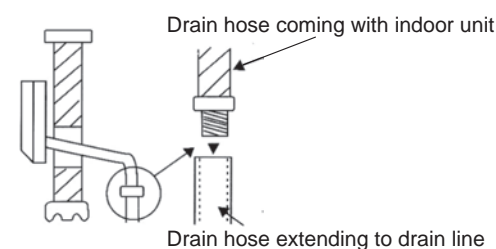


Hold the 90 degree bend root, bend one tube one time, slowly, no quicker than 10 seconds/90 degree bend.

INSTALL DRAIN PIPE AT INDOOR

- The drain hose must be placed beneath the copper pipes and MUST NOT be hunched or bended sharply.
- Do not pull the drain hose too hard, otherwise it may get broken.
- Before passing drain hose through the hold, wrap with insulation to keep from possible damage.
- The copper pipe and the drain hose must be wrapped by piping wrap.

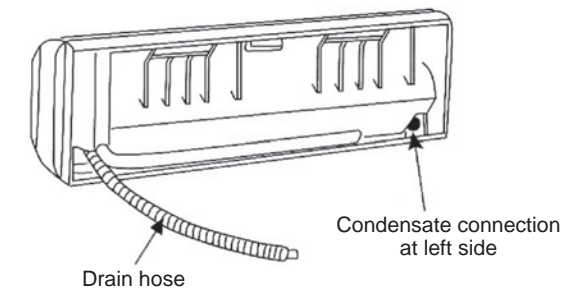
- Insulation pad (underlay) should be used where the pipe contacts the wall.



INSTALLATION-INDOOR UNIT

REFIT DRAIN HOSE FROM THE RIGHT TO THE LEFT SIDE

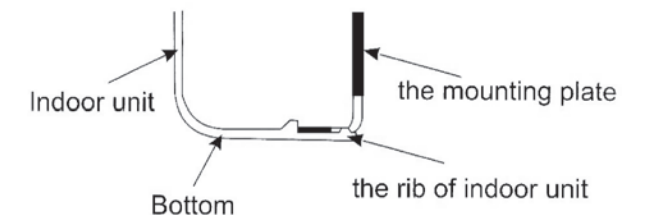
- If drain hose needs to be refitted from the original position (right side) to left side of the indoor unit, careful handling is very necessary.
- Refitting method: remove the drain hose from original position, without breaking hose. Unplug the plug at the left side. Apply water-resistant glue to fit the drain hose and the fitting before securing it.
- Apply water-resistant glue onto the plug and fit it back into the condensate connection at right side.



NOTES: May use some sort of clamp to double secure connections.

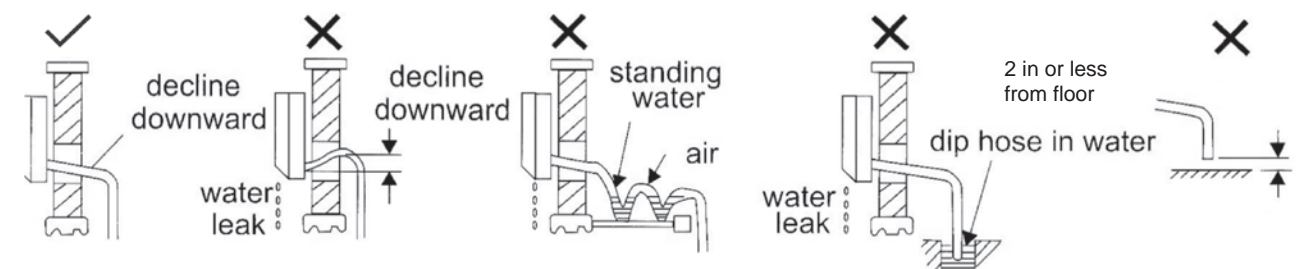
HANG INDOOR UNIT

- Run copper set/wire cables/drain hose through the wall hole and hang the indoor unit onto the mounting plate (place the hook on the mounting plate into the hanging rib at rear side of plastic casing).
- Snap the plastic casing bottom into the mounting plate, gently .



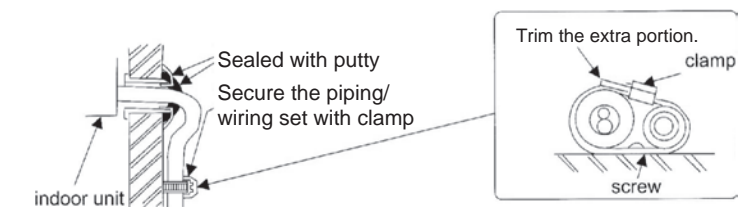
SHAPE THE DRAIN HOSE

- To drain the condensate easily, the drain hose should be inclined downward (pitched towards drain direction 1/4" per foot).
- Figures below from the 2nd to 5th show some incorrect practices.
- Drain hose may be extended using the hose coming with the installation list.



STUFF AND SEAL THE HOLE FOR COPPER LINE SET/WIRE CABLE/DRAIN HOSE

- Use putty to seal the wall hole.
- Use clamp (pipe fastener) to secure the pipe at specified position.



CONNECT REFRIGERANT PIPES BETWEEN INDOOR AND OUTDOOR UNITS

Firstly, connect copper tubes at indoor unit. Bend pipes by tools but not by hands. Extra length is needed for future service.

REFRIGERANT PIPES:

For distance other than 25' between indoor and horizontal venting condensing units, refer to the following table for copper sizes.

Refrigerant Valve and Pipe Size/Length

K Btu/h	Valve Size	Line Sizes at Different Length	
	Liq, Gas	15-30ft	31-60ft
09	1/4", 3/8"	1/4", 3/8"	1/4", 3/8"
12	1/4", 3/8"	1/4", 3/8"	1/4", 3/8"
18	1/4", 1/2"	1/4", 1/2"	1/4", 1/2"

CUT REFRIGERANT PIPE:

Make sure the pipe section where is to be cut is straight and smooth. Apply cutting blade straightly perpendicular to the pipe surface. Don't cut too fast or too hard. Turn and tighten the tube cutter slowly. Remove residual left at the cutting edge. The cutting edge should be clear and clean and smooth.

CONNECT REFRIGERANT PIPES

Refrigerant Pipe Length and Height

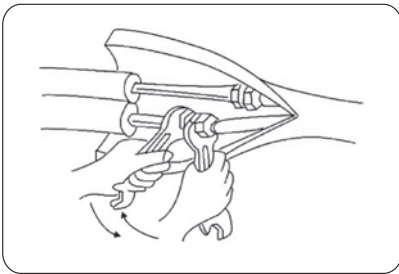
1,000 Btu/h	Length (Ft.)	Height (Ft.)
09	23	3.82
12	24.3	3.6
18	31.4	3.8

Connect Copper Pipes-Flare/nut Connection at Both Indoor and Outdoor Units

Proper torque shall be applied to make good connection at female nut, flare and male nut, as recommended in the following table. Too much torque may damage and break flare/nut seal. Too less torque may not ensure good seal. ALWAYS use a pair of wrenches.

Refrigerant Pipe Flare/Nut Connection Tightening Torque

Flare Nut	Tightening Torque
1/4-3/8"	25 Ft. LBs (350 Kgf.cm)
1/4-1/2"	40 Ft. LBs (560 Kgf.cm)
1/2-3/4"	60 Ft. LBs (840 Kgf.cm)
7/8-1 1/8"	110Ft. LBs (1540 Kgf.cm)

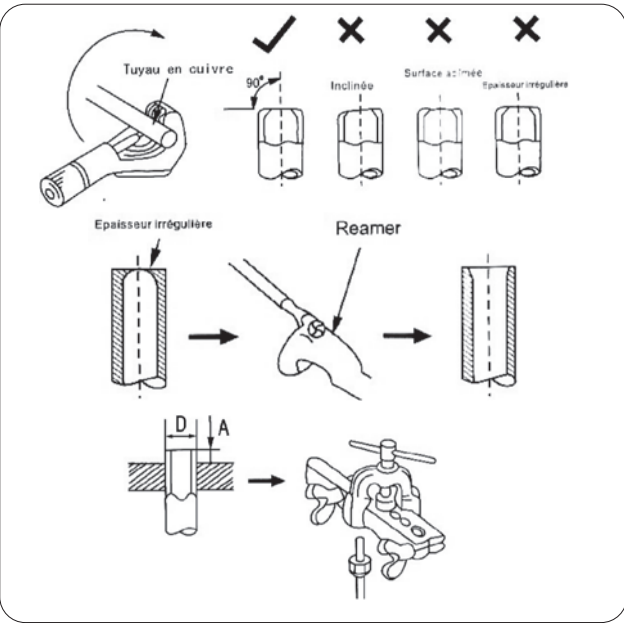


Connect Copper Pipes-Sweat Connection

In this case, put wet rag to protect valves or other components from being overheated. When using flux, rub the tube surface using steel wool to shine and clean to dry as so to keep to-be-sealed system from any possible contamination.

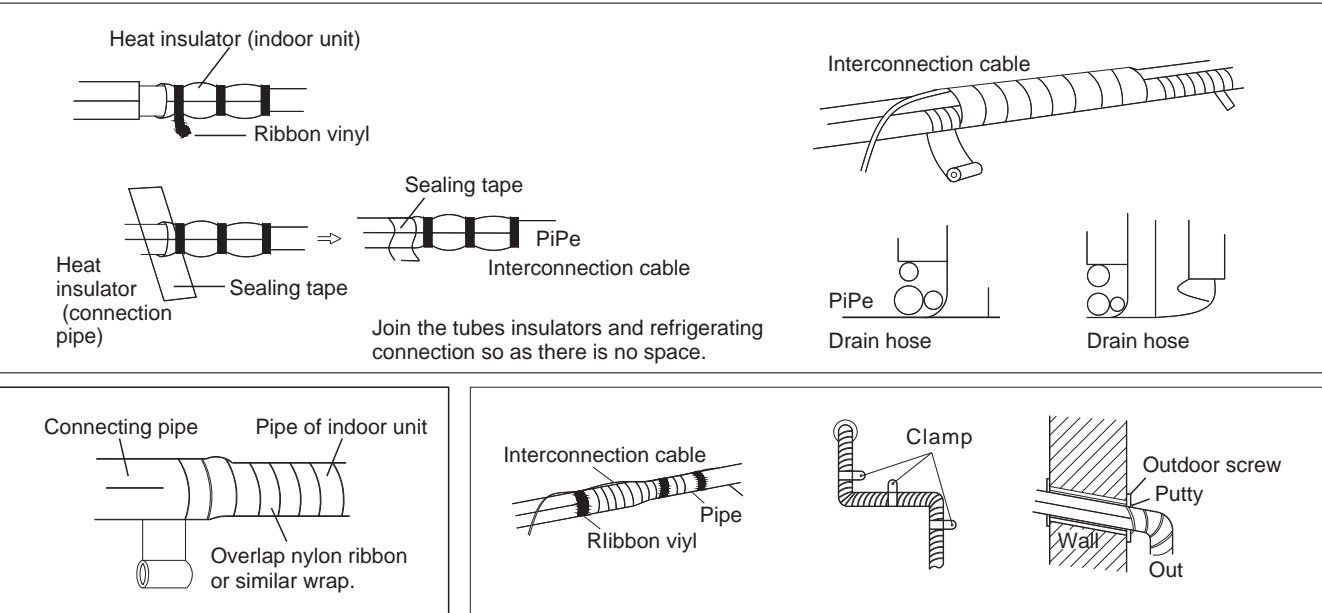
Running Interconnection Refrigerant Lines:

Use clean refrigeration grade of copper tubing only. Keep the copper lines from kinking and transmitting noise to walls, cabinets, etc. Not to exceed 100' with 35' of vertical lift included. Insulate the suction line with at least 3/8" thick insulation tubes. Band and tape and secure refrigerant lines. Support copper lines at proper distance apart to keep tubes from sagging.



CONNECT REFRIGERANT PIPES BETWEEN INDOOR AND OUTDOOR UNITS

Seal Copper Line Set/Wire Cable/Drain Hose Line Combination



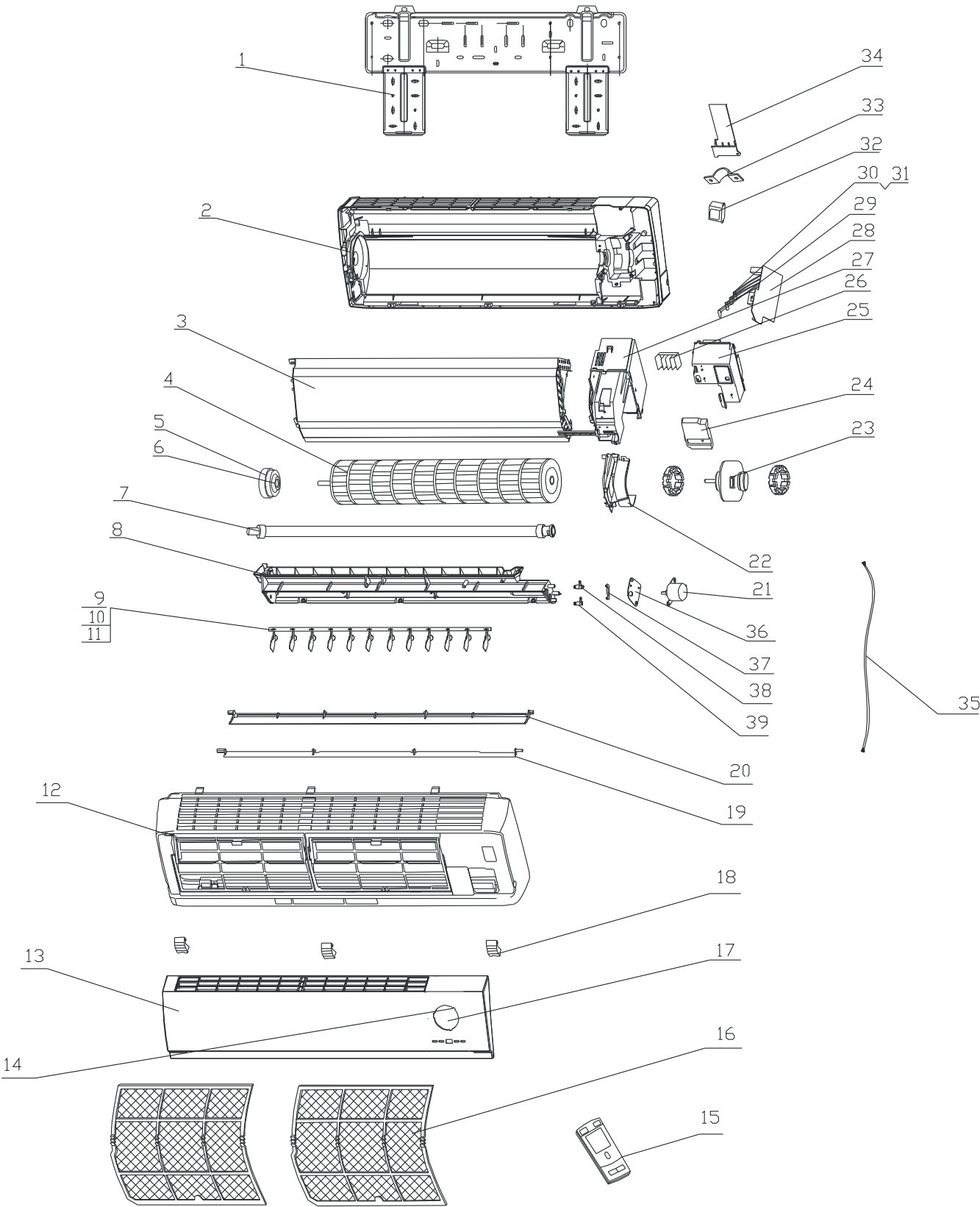
- * Run cables along with the refrigerating copper line sets and secure them with tapes at 6 feet apart.
- * Wrap tape closely (cover a third of the width of the nylon ribbon tape applied early) to get good seal.
- * Tape to seal the end of taping.
- * Shape the pipe combination gently, without causing kinking, sharp bending, or other damage to it.
- * Fix the pipe combination securely on the external wall with proper clamps, as drafted below, at 6 feet apart.
- * Fill the gap between the wall hole and wall sleeve with putty to keep from rain or dust getting inside.

PIPING GUIDE

To keep the allowed bending radius, please make the packed soft pipes vertical for expanding.			Please do not expand only one side of the packed soft pipes.
Please make use of semicircle pulley to keep the allowed bending radius.			Extremely bending could damage the pipes.
Please use twisting wheel to avoid improper bending.			Over length soft pipes will lead to irregular bending.
Please use rigid elbow to keep the bending radius while soft pipes operating.			Undersize bending will damage the soft pipe.
Please keep the minimum bending radius while installing.			Short soft pipes will have them bending undersize, it's not allowed.

EXPLOSIVE VIEW AND SPARE PARTS LIST

EXPLODED VIEW OF COMPONENT 1-WMMS-09EW-V2B(59) (2)



EXPLOSIVE VIEW AND SPARE PARTS LIST

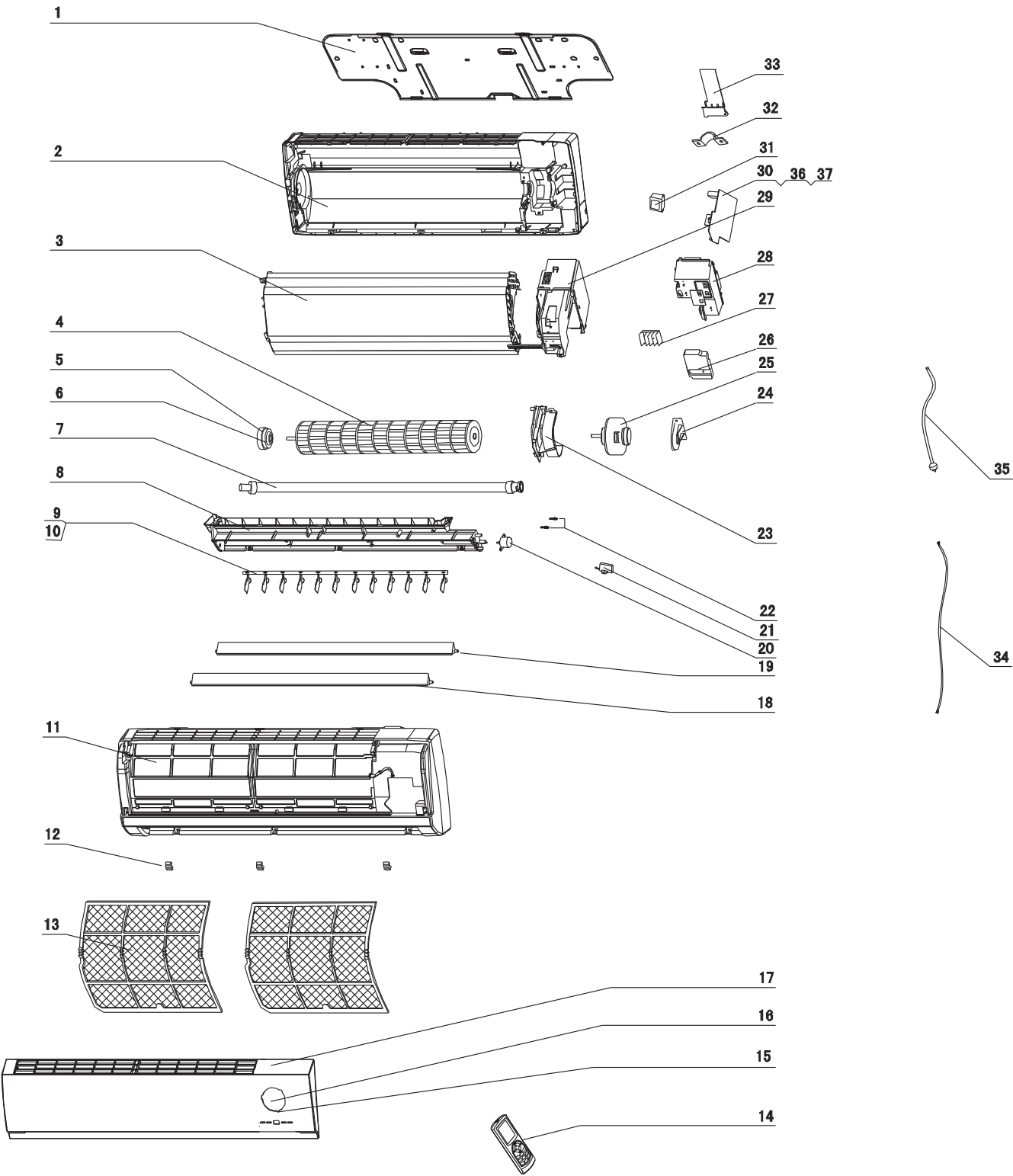
COMPONENTS AND PARTS LIST 1-WMMS-09EW-V2B(59) (2)

No	Description	Part Code	Qty
1	Wall-mounting frame	01252220	1
2	Rear case	222020016	1
3	Evaporator assy	010020534	1
4	Cross flow fan	10352001	1
5	Ring of bearing	76512203	1
6	/	/	/
7	Drainage pipe	0523001401	1
8	Water tray	201820270	1
9	Swing louver	10512088	12
10	Swing linkage 1	10582002	1
11	Swing linkage 2	10582003	1
12	Front case	200022107	1
13	Front panel	200022092C	1
14	Decorate piece	68012019	1
15	Remote control YT1F	30510049	1
16	Filter	111200511	2
17	Receiver board D5K3	30545041	1
18	Screw cover	242520062	3
19	Guide louver 1	105120332	1
20	Guide louver 2	105120342	1
21	Motor MP28VB	15012086	1
22	Motor clamp	26112014	1
23	Motor FN14P-PG	150120763	1
24	Electric box cover	20122082	1
25	Covering plate	20112058	1
26	Terminal board T4B3A	42011233	1
27	Electric box	20112057	1
28	Main PCB MB803F2AJ	30038004	1
29	Room sensor 15K	390000451	1
30	Tube sensor 20K	3900019814	1
		3900019815	1
		3900019816	1
31	Jumping connector	4202300102	1
32	Transformer 48X26P	43110293	1
33	Wire clamp	71010103	1
34	Rear clamp	24242001	1
35	Connecting cable	/	1
36	swing louver clamp	10582409	1
37	swing louver	10582408	1
38	swing louver(up)	10542004	1
39	swing louver(down)	10542005	1

The above data are subject to change without prior notice.

EXPLOSIVE VIEW AND SPARE PARTS LIST

EXPLODED VIEW OF COMPONENT 2-WMMS-12EW-V2B(59) (2)



EXPLOSIVE VIEW AND SPARE PARTS LIST

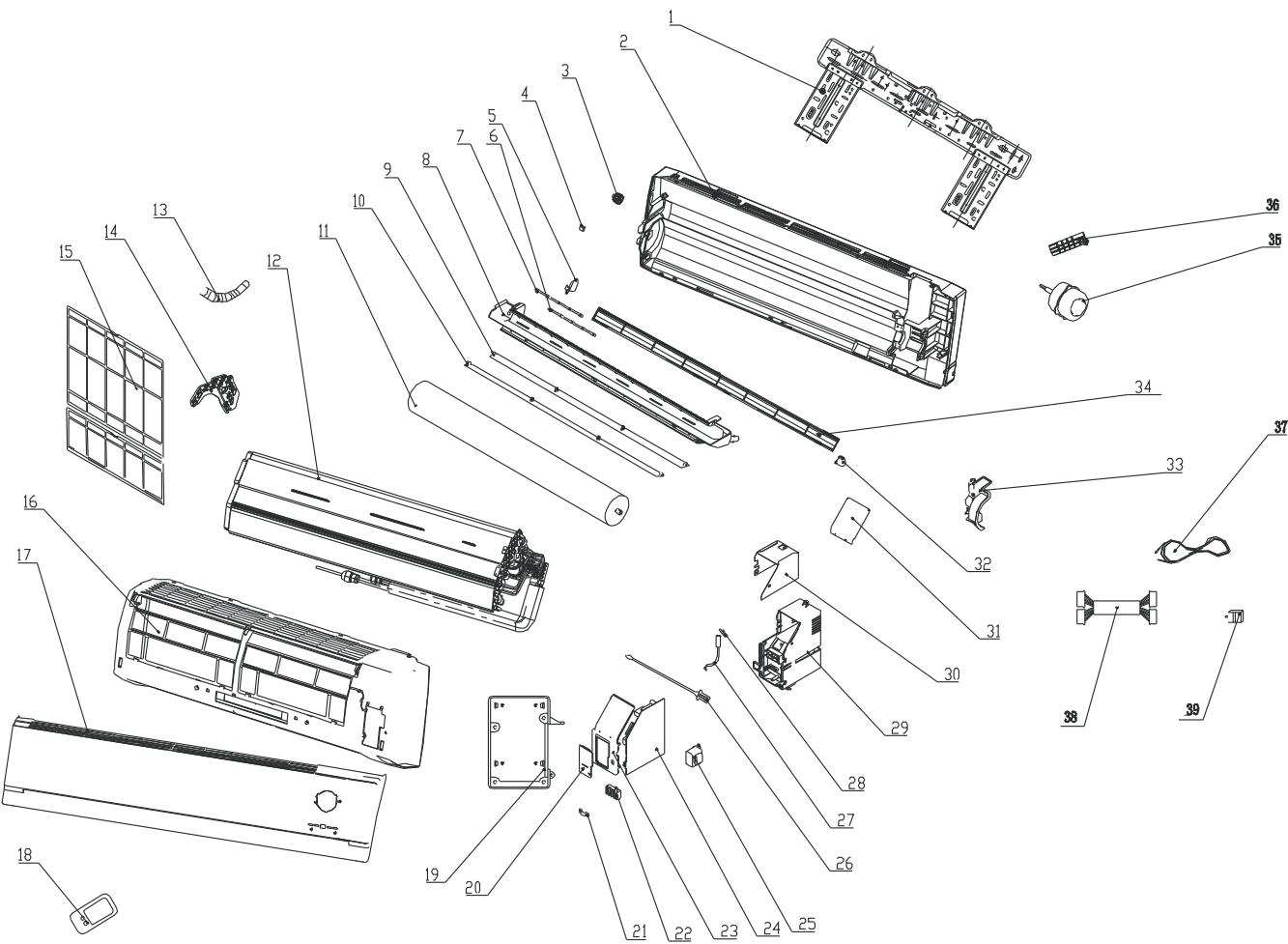
COMPONENTS AND PARTS LIST 2-WMMS-12EW-V2B(59) (2)

No	Description	Part Code	Qty
1	Wall-mounting frame	01252384	1
2	Rear case	222020503	1
3	Evaporator assy	01002250	1
4	Cross flow fan	10352005	1
5	Ring of bearing	76712015	1
6	\	\	\
7	Drainage pipe	0523001401	1
8	Water tray	201820306	1
9	Swing louver	105120413	12
10	Swing linkage	105824397	1
11	Front case	200022958	1
12	Screw cover	242520072	3
13	Filter	11122440	2
14	Remote control YT1F	30510049	1
15	Decorate piece	68012019	1
16	Receiver board	30545042	1
17	Front panel	200022921	1
18	Guide louver	261120432	1
19	Guide louver	261120422	1
20	Motor MP28EC	15212002	1
21	\	\	\
22	\	\	\
23	Right motor clamp	26112429	1
24	Bearing holder	26152423	1
25	Motor FN20M-PG	150120873	1
26	Electric box cover	20122081	1
27	Terminal board T4B3A	42011233	1
28	Covering plate	20112060	1
29	Electric box	20112059	1
30	Main PCB M803F2AJ	30038004	1
31	Transformer 48X26P	43110293	1
32	Wire clamp	71010003	1
33	Rear clamp	26112430	1
34	Connecting cable	400204056	1
35	\	\	\
36	Room sensor 15K	390000451	1
37	Tube sensor 20K	3900019814	1
		3900019815	1
		3900019816	1

The above data are subject to change without prior notice.

EXPLOSIVE VIEW AND SPARE PARTS LIST

EXPLODED VIEW OF COMPONENT 3-WMMS-18EW-V2B(59) (2)



EXPLOSIVE VIEW AND SPARE PARTS LIST

COMPONENTS AND PARTS LIST 3-WMMS-18EW-V2B(59) (2)

No	Description	Part Code	Qty
1	Wall-mounting frame	01252004	1
2	Rear case	22202329	1
3	Fan bearing	76512203	1
4	Screw cover	24252015	3
5	Swing louverb	105120472	11
6	Swing link 1	10582057	1
7	Swing link 2	10582058	1
8	Water tray	20182057	1
9	Guide louver(up)	10512085	1
10	Guide louver(down)	10512086	1
11	Cross flow fan	10352022	1
12	Evaporator assy	01002913	1
13	Drainage pipe	05230014	1
14	Evaporator support	24212067	1
15	Filter	11122048	2
16	Front case	200026524	1
17	Front panel	2000284402	1
18	remote control YT1F	30510049	1
19	Displaying light board	22432071	1
20	Electric box cover 1	20112019	1
21	Wire clamp	71010103	1
22	Terminal board	4201026601	1
23	Electric box cover	20112020	1
24	Main PCB	30038022	1
25	Transformer 57X25F	43110257	1
26	Room sensor 15k	390001912	1
27	Tube sensor 20K	3900019814	1
		3900019815	1
		3900019816	1
28	Sensor insert	42020063	3
29	Electric box	20112018	1
30	Lower shield of electric box	01592037	1
31	Upper shield of electric box	01592038	1
32	Stepping botor MP35XX	15213001	1
33	Motor clamp	26112095	1
34	Helicoid tongue	26252009	1
35	Motor FN20K-PG	15012718	1
36	Pipe clamp	24242001	1
37	Connecting cable	/	1
38	Plank cable	4003004201	1
39	Jumping connector	4202300106	1

The above data are subject to change without prior notice.

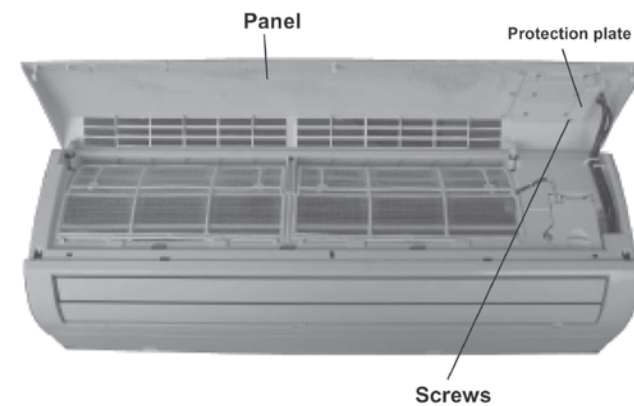


DISASSEMBLY PROCEDURE

OPERATING PROCEDURES / PHOTOS

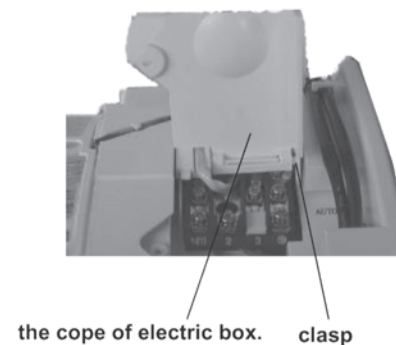
Disassemble Front Panel

Lift the front panel upward. Firstly, screw off a screw fixing the upper protection plate at the receiving window and remove the protection plate. Then, pull away the connection terminal. Pull the panel outward with force along the groove fixing the panel of the panel body to remove the panel.



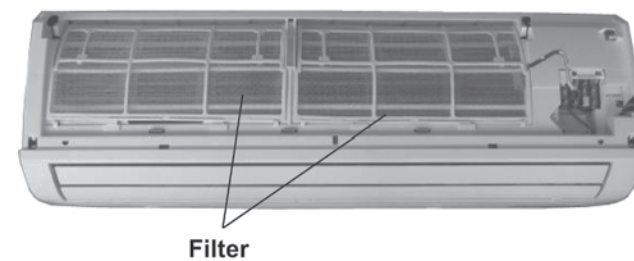
Disassemble Cope of Electric Box

Firstly, screw off the screw fixing the cope of electric box, open the cope of electric box, loose the clasp and remove the cope of electric box.



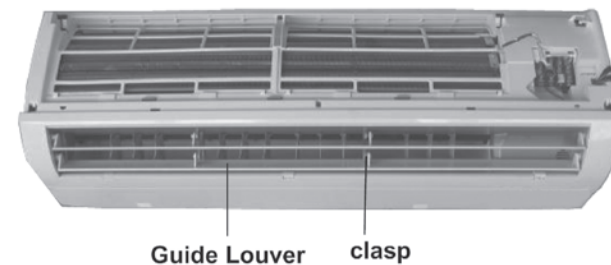
Disassemble Filter

Push the filter inward, and then pull it upward to remove it.



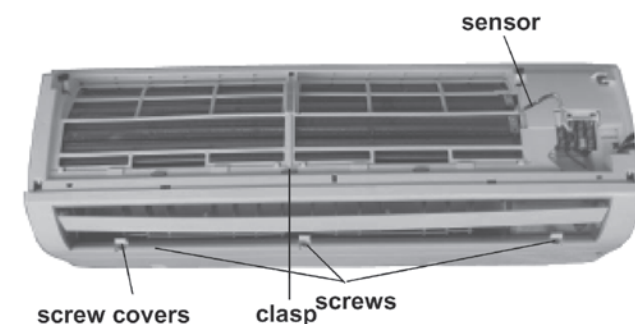
Disassemble Lower Guide Louver

Manually bend the lower guide louver to loose the clasp at the guide louver. Remove the lower guide louver. (Note: to remove the upper guide louver, you must open the front case first, then screw off the screws fixing the upper guide louver and the water tray, bend the upper guide louver and remove the upper guide louver).



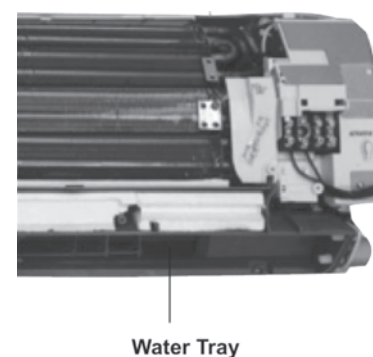
Disassemble Front Case

Unscrew the three screw covers at the front case, unscrew the three screws, pull open the clasp at the front case, and remove the front case.



Disassemble Water Tray

Screw off the fixing screws fixing the water tray with a screw driver. Loose the clasp at the other end and pull out the terminal board of the step motor. Pull upward the water tray and take it out. Remove the water tray.

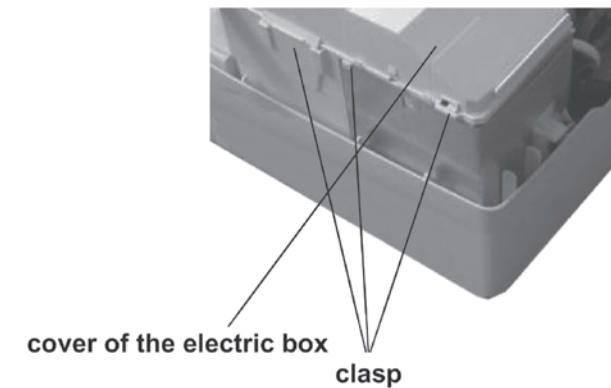


DISASSEMBLY PROCEDURE

OPERATING PROCEDURES / PHOTOS

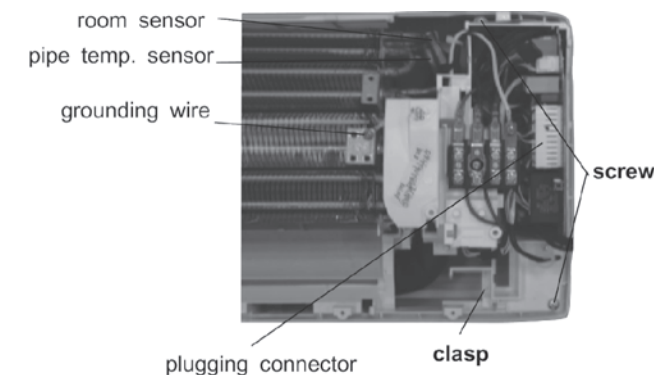
Disassemble Cover of Electric Box

Loosen the three clasps, and pull upward to remove the cover of the electric box.



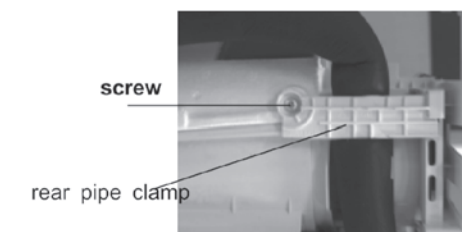
Disassemble Electric Box

Remove the grounding wire of the evaporator. Take out the pipe temp. sensor. Unplug the plugging connector of the indoor motor at the electric box, use screwdriver to unscrew the screw fixing the electric box, loose the clasp and remove the electric box.



Disassemble Evaporator

Screw off one screw which fix the connection board clamp. Take down the connection board clamp. Screw off 4 screws fixing the left and right side of the evaporator, then elevate left side the evaporator to remove it backward.

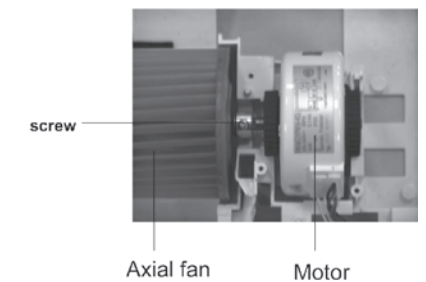
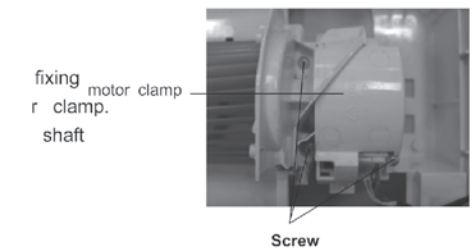
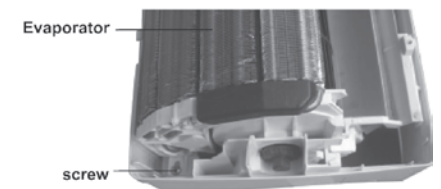
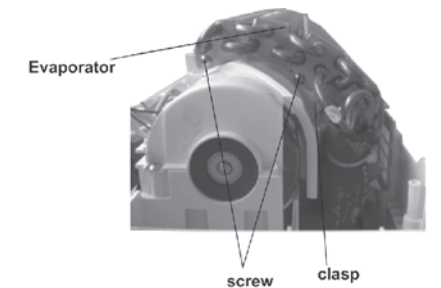


CAUTION:

When repair, Carefully take out the evaporator and pay attention to protect the connecting pipe.

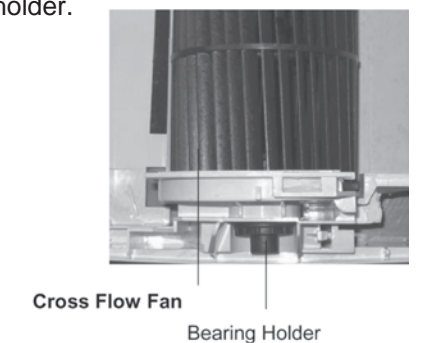
Disassemble Motor

Use screwdriver to unscrew the two screws fixing the motor clamp, and remove the motor clamp. Unscrew the three holding screws at the shaft sleeve, and remove the motor.



Disassemble Cross Flow Fan

After remove the motor, pull out it from the left bearing holder.



WARRANTY AND TECH. SUPPORT

YMGI warrants to the purchaser/owner(s) that YMGI products be free from defects in material and workmanship under the normal use and maintenance, with the standard Limited Product Warranty Policies that comes with the unit or sales package.

YMGI IS NOT RESPONSIBLE FOR

- * Damage or repairs required as a consequence Customer do-it-yourself(DIY) installation and/or any other faulty installation or improper application.
- * Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operation.
- * Damage as a result of floods, winds, fires, lightening, accidents, corrosive atmosphere, or other conditions beyond the control of YMGI.
- * Any damages to person or property of whatever kind, direct or indirect, special or consequential, whether resulting from use or loss of use of the product.
- * Failure to start due to voltage conditions, blown fuses, open circuit breakers, or other damages due to the inadequacy or interruption of electrical service.
- * Parts not supplied or designated by YMGI.
- * Products installed outside USA or Canada.
- * Regular equipment maintenance or field service or field inspection.
- * Any problems due to improper cooling and heating load calculation of the room/building the air conditioner/heat pump system is to be installed. Equipment users can get the calculation schedule from your room/building architect or your installation or related service HVAC contractor, who should have knowledge and tools to do these calculation correctly.
- * Any problems due to improper sizing and selecting air conditioner/heat pump system. These equipment sizing and selection work should be conducted by either your room/building architect or your installation or related service HVAC contractor, who should have knowledge and tools to do these calculation correctly, and get your approval, before your purchasing these air conditioner or heat pump equipment.
- * Any problems due to improper installing of the air conditioner/heat pump system. Installation should be conducted by currently licensed HVAC technician, following manufacturer installation instructions, all governing safety codes, with care and professionalism.
- * Any problems due to improper operation of the air conditioner/heat pump system. Users shall keep the manual and look up in the manuals for the correct understanding how the unit will work and how to operate the unit correctly.
- * Any problems due to improper maintenance of the air conditioner/heat pump system. Like a car, regular maintenance or yearly checking is necessary for the unit to work properly for you, before the season comes. For example, air filter shall be checked for cleanliness from time to time. Remote control batteries shall be checked for enough power, before judging the unit is not working...

CONTACT FOR FIELD SERVICE OR REPAIR

The following people, in a prioritized sequence, will take care of your request or issue:

- 1) The original installer; otherwise,
- 2) Your current service contractor; otherwise,
- 3) Authorized contractor in YMGI list that is close to you; otherwise,
- 4) Authorized Distributor in YMGI Distributor list; otherwise,
- 5) Contractor/Distributor you prefer who is close to you.

CONTACT FOR GENERAL TECHNICAL QUESTIONS OR SUPPORT, IN A SEQUENCE:

- 1) The original installer; otherwise,
- 2) The current service contractor; otherwise,
The original licensed installer or current service contractor should be contacted first of all, since they installed the unit and/or know more details than anybody else.
They will check the unit and find out the problems with the professional knowledge about HVAC and electric product installation by using special tools or instrument.
They can contact YMGI technical support for technical help during unit installation or inspection.
Product model and serial numbers needed, which can be found on unit nameplate sticker, so that our technician can quickly identify the unit, parts and wiring diagrams, among our many products and models.
- 3) The distributor; where the unit is purchased from otherwise,
- 4) YMGI Technical Support:
Tel: (866) 833-3138*703 Email: techsp@ymgigroup.com

USER NOTES AND SERVICE LOG

USER NOTES

Put down whatever questions you have or problems you have seen as a unit history:

No.	Date	Questions or Problems	Remarks

SERVICE/MAINTENANCE LOG

Put down whatever questions you have or problems you have seen as a unit history:

No.	Date	Service/Maintenance Conducted	Person/Phone

